

PRODROMUS,

OR

AN INQUIRY

INTO THE

FIRST PRINCIPLES OF REASONING;

INCLUDING

AN ANALYSIS OF THE HUMAN MIND.

ΒY

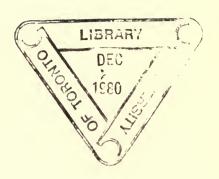
SIR GRAVES CHAMNEY HAUGHTON,

K.H., M.A., F.R.S., &c. &c.

MEMBER OF THE INSTITUTE OF FRANCE, &c. &c.

" ALL MEN ARE AS THE VULGAR, IN WHAT THEY DO NOT UNDERSTAND." -BURKE

M DCCC XXXIX.



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THE RIGHT HONOURABLE

THE EARL OF MUNSTER, F.R.S.

CORRESPONDING MEMBER OF THE INSTITUTE OF FRANCE,

Se. Se. Se.

My DEAR LORD,

The warm interest which your Lordship has shown in promoting the advancement of literature, by your first establishing, and subsequently fostering with the greatest care, a Society for translating and publishing inedited Oriental MSS., which has made your name known throughout this country and the rest of the civilized world, leads me, in addition to the many obliging attentions I have received from yourself during an intercourse of several years, to place under the protection of your Lordship's name the following Observations on the nature of language—the noblest instrument at the

disposal of man; and to which he is as much indebted for his privilege as a reasoning being, as he is to Providence for having made him a rational creature. I am induced to hope, that the public at large may be roused to feel the high importance of the subject, as well as the value of correct notions with regard to it in physical science; and that every man of reflection may become aware of the true nature of that upon which, as the adjunct of reason, is founded the moral excellence of the human race.

I remain,

My Dear Lord,

With every sentiment of respect and regard,

Your Lordship's

Very devoted humble servant,

GRAVES C. HAUGHTON.

PREFACE.

This little work must not be mistaken for an idle disquisition about words. So far from this being the case, its object is, to consider the very foundation of human reasoning, and, consequently, of human knowledge. The current of metaphysics runs remarkably slack at present in this country; and perhaps the occasion is only the more favourable for sounding the depth of the abyss, and discovering the amount of its utility to mankind. Whether a period of the world so peculiarly devoted to pleasure and the practical business of life is one fitted for fixing the attention of the minds of men upon their own misconceptions, will be best learnt from experiment: but should it turn out, that they are so absorbed in their devotion to party politics, railways, steam-engines, sonatas, and sectarian controversy, as to preclude all other subjects, these pages must, of course, share the fate of every

thing produced out of season. In that case, they must wait for another revolution of the cycle, before they may be read. It is much more natural that mankind should prefer what brings them present applause, without much labour of thought, than devote themselves to studies that are in some measure against the ordinary tendencies of their minds: though some, like the good man in Molière, who was so surprised when informed that he had been all his life talking prose, will, perhaps, be astonished to learn, that, though they absolutely detest the name of Metaphysics, they never draw an inference, however obvious, that is not the result of a metaphysical process, equalling in difficulty the generality of the remarks that I have prepared for their consideration.

I have endeavoured, notwithstanding, to make what I had to say as simple and clear as was in my power; and I have, in consequence, sacrificed elegance to precision and perspicuity.

The English are, in an eminent degree, gregarious thinkers; and whatever is catered for their understandings is generally taken up, or neglected, by all. Should curiosity, however, lead any one to open this volume who has never turned his attention to metaphysical pursuits, let him not throw it down in despair; as it is particularly intended for

the relief of those whose tender consciences may occasionally accuse them of being ignorant of so important a branch of knowledge. Now, the perusal of this little work will save him a world of thought, and also of regret, for his ignorance. This will surely be a strong inducement to the lover of truth to persevere in reading it through. he be of a bold and inquisitive turn of mind, he will find in it a guide, by the assistance of which he may explore all the dark and mysterious labyrinths of metaphysics. Let him, however, beware how he separates himself from it, while led on by the fascination of the moment; for such are the charms of some of those exquisite specimens of misapplied genius, that he may utterly lose himself, and stray far from all human relief. Should such a result take place, his case is desperate; and having no means of extricating himself, he will be reduced to the situation of Milton's fallen angels, who are represented as reasoning on these very subjects-

"And found no end, in wand'ring mazes lost."

Under every disappointment in this country, I feel I have still an unfailing resource in the truth-inquiring spirit of Germany; and I do not despair of a patient hearing from its philosophers, ever

though I do not bow the neck to their metaphysical Baals and Molochs; and may appear before them with the disadvantage of having been rejected by the sanctimonious worshippers of the golden calf, at home. The motto of Germany is FIAT JUSTITIA, RUAT CŒLUM; and I therefore feel confident, that if I have discovered any thing useful, it will be accepted in a friendly spirit, and gain an immediate hearing: for its literary courts are always open; its judges on their seats; and it matters not whether the appellant be one of the sons of the fatherland, or a barbarian; as he will, in either case, be judged impartially, and obtain the same justice as a native of the soil, even though he may have come, like another Anacharsis, from the Scythian wastes of France or England.

Should any one be of opinion that the truths I have brought to light have been previously discovered, he should point out where the various topics have been discussed with system, or investigated with the exactness and fulness they deserve. He should remember, that, in this instance, as in many others of human knowledge, the remark of Solomon must, from the greater age and activity of the world, gain fresh strength every day. If it were true in his time, that "there is nothing new under the sun," it must be much more so after the

lapse of two thousand five hundred years; and during a period that has been stored, by the invention of printing, with the memorials of other men's thoughts, to an extent that would have formed at least one exception to the remark of that wise monarch.

The mention of Solomon's name recalls to my mind a story relating to him, that is current among Mahomedan nations, and which, I think, will help to illustrate the design of the following observa-Pious Moslems are of opinion, that much of the glory of the Hebrew sovereign's reign resulted from the great ability and skill of his primeminister, Asaph; whose knowledge of the occult sciences was so profound, that it enabled him to control the qins (genii), a race remarkable for their stupidity and malevolence. The fear these beings had of Asaph was such, that during his lifetime they refrained from every act of annoyance to mankind. Solomon, however, was resolved that his subjects should continue to benefit by the terror which his vizier had inspired; and, on Asaph's death, he had him embalmed, and then placed in the treasury; where he was dressed, and set up, resting on his staff. The gins, who were ignorant of his death, stole from time to time to the treasury, and peeped in slyly at the window, to see what their

tyrant was about; when observing him always in a vigilant attitude, they invariably fled, lest he should punish them for their impertinent audacity. this state of ignorance they remained for a long time: but, at last, it happened that some white ants, so well known in the East for their destructive ravages, found their way into the treasury; and attacking Asaph's staff, he fell upon the ground: upon which the gins, finding out the trick that had been practised upon them, began to vex and harass the human race, as they had been in the habit of doing before.—Now, reader, what is the whole host of metaphysicians that have formerly existed, but so many Asaphs, merely preserved for the purpose of imposing upon mankind? and what are all their abstract words, but the staves upon which they rested their arguments while living, and which still continue to prop up their systems now they are dead?—and, finally, what are these few pages, but so many white ants, that will, I trust, destroy their props, and let those arch deceivers fall to the earth, never to be set up again, as bugbears to our race?

To the judicious sentiment of Locke, which is contained in the Reflection placed at the head of the following remarks, I wish to draw the reader's particular attention; because it is not merely most PREFACE. vii

just, but, occurring as it does at the close of his great work, it seems to have loomed upon his mind as the consummation of all his speculations, and even to be a condemnation of the work itself, or at least to intimate that he had arrived at a conviction that language itself was the parent of much of the error it was employed to expose. The opinion, therefore, of so masterly a mind is worthy of the highest consideration, and I have accordingly given it its present conspicuous place: for though it appears exactly shaped to suit the following observations, it did not present itself to me till after they were written; and the same remark applies equally to the quotation with which this work concludes.

Having been long engaged on a work which is intended to demonstrate the necessary connexion, relation, and dependence of *Physics*, *Metaphysics*, and *Morals*, I found the whole of these topics a perfect chaos, from the deceptive character of language; and I felt, accordingly, that there was no chance of giving a profitable direction to my labour, without bestowing a thorough consideration upon that indispensable instrument of thought. The following remarks were accordingly written by way of preliminary observations. As it may be some time before that work is ready, I have thought it as well to send forth this little messenger, to ascer-

tain what degree of chance exists for its meeting with a favourable reception. It is my hope that I shall be able to lead the reader

"Through Nature, up to Nature's God;"

and bring home to him, with irresistible conviction, the inconsistencies and absurdities of materialism. With this view, I have laboured to clear away the rubbish that has been heaped up so high from antiquity to the present time, as scarcely to allow us more than a glimpse of truth. Berkeley has well said, that "we first raise a dust, and then complain we cannot see:" but he neglected to analyse the nature of this dust, or mankind would have been in possession of the means of laying it, whenever it clouded their vision.

Should any unforeseen circumstance prevent the accomplishment of my entire plan, I feel I shall not have lived in vain, if the completion of this portion of it shall help to liberate The Human Understanding from some of its strongest bonds of self-delusion and absurdity.

PRODROMUS.

REFLECTION.

"The consideration, then, of *Ideas* and *Words*, as the great instruments of knowledge, makes no despicable part of their contemplation, who would take a view of human knowledge in the whole Extent of it. And, perhaps, if they were distinctly weighed, and duly considered, they would afford us another sort of Logic and Critic, than what we have been hitherto acquainted with."

Locke's Essay concerning Human Understanding, Book IV. Ch. xx. § 4.

GENERAL NOTE.

The following disquisitions are strictly confined to the objective view of nature.



INTRODUCTION.

 \S 1. Were we to hear of an astronomer who should place full reliance on his observation of the stars, though he had never verified his instruments, nor depended for their verification on a competent assistant, we should not merely be extremely surprised, but reject with contempt the results of his labours. Nay, sensible men would even require that a scientific observer should be well acquainted with the principle upon which such instruments were constructed, and assure himself that no possible cause of error lay in so essential a point. But, if we are thus particular in the means of obtaining accuracy in the results of physical inquiries, it is strange that we are so indifferent and negligent in the examination and verification of the only instrument we can employ in philosophical inquiry; that is, in ascertaining the value and scope of the words we reason with. The cause is simply, I believe, that, as we have employed language by rote from infancy upwards, and have always depended upon it in the common routine business of life, we are led on, gradually, to use it in higher matters; till at last we place such reliance upon it, that we should almost

be considered insane to doubt its general accuracy. It is my object, however, to show, that partly from disdain for such investigations, and partly from their supposed difficulty, we have proceeded in a round of error, till at last we have, by our neglect, arrived at conclusions so irreconcileable with common sense. that the mass of mankind regard with something of scorn the aërial castles of metaphysics. And, if the labours of the mathematician meet with better success, we must rather attribute it to the certainty that attends his calculations, when the data are right, than to any means he possesses of avoiding error in his reasoning: it will be found however, as might be expected, that the moment he theorizes, he falls into the same inconsistencies as the metaphysician. The analytic chemist, too, will be seen to be in greater difficulties than the mathematician, whenever he attempts to reason on the invaluable facts his experiments and acumen bring to light; inasmuch as he has to account for the most mysterious results, in words, which are, to him, only so many counters, of which he has not previously fixed either the relative or absolute value. We have acted with regard to language as the alchymists did with respect to mineral productions—we have made use of it in a gross way; and if we have been able to make any discoveries in philosophy by its help, it is more owing to chance than system. But I believe, that if we imitate the chemists of our own times, we shall arrive at results altogether new and unexpected: it is only by analysis that we can hope to discover truth; and it is solely by that process that chemistry has taken its station as an exact science, next in order to astronomy.

§ 2. I trust I shall be able to render intelligible, to every person of ordinary education and capacity, what I feel to be of such great importance. The truth has been often seen by glimpses; but I am not aware that any one has undertaken to give a definite and comprehensive view of the subject; and far less has any one attempted to solve the enigma, easy as I believe it to be. It is therefore my intention to make language give evidence against itself, and render up its secret—to compel it to confess the manifold impositions it practises on the human understanding, and to acknowledge, that, notwithstanding all its disguises, and its supposed riches, every word may be shown to mean nothing more than THING, or STATE; and that even the last of these two terms is a mere sound—a symbol boldly invented by the intellect, for the purpose of reasoning. I shall enter upon the consideration of these two classes of words, after a few preliminary remarks.

⁽¹⁾ The term *intellect* is uniformly employed, throughout these pages, for the thinking agent, or self.— See the remarks on the Intellect, § 158.

§ 3. All words are but of two kinds; to which the terms Concrete² and Abstract have been given. The first class comprehends the names of all objects that come under the cognisance of one or more of the five senses; that is, all which we can taste, touch, smell, hear, or see. Whatever, therefore, is not to be distinguished by any of our senses, nor derived by indubitable inference - such as, God, Soul, and Power³—is called Abstract. This subdivision points out with accuracy the mode in which this investigation should be pursued: and I shall, accordingly, commence with the consideration of Concrete Terms, or those words which designate real things; that is, things perceived by the senses, and those we derive by indubitable inference4. It might at first appear, that the expression 'Concrete' and 'Abstract,' having a scholastic air, might be altogether replaced with advantage by 'Conceptions' and 'Perceptions;' the latter having the great advantage of being referrible, by our intelligence, to the verbs to conceive and to perceive: but, though these are undoubtedly better

⁽²⁾ I limit the word 'Concrete' here to nouns that imply the names of real things; and I except, for my present purpose, all adjectives: yet I believe the whole of this class of words, not derived from verbs, to have been originally the names of things; just as we now employ rose, pink, copper, &c. for the names of colours.

⁽³⁾ For the peculiar sense in which the word 'Power' is here employed, see §§ 123—130.

⁽⁴⁾ The reader will find in § 165, the reason why I have not in this place alluded to Ideas.

for all familiar purposes, the former are not without their use, as being more comprehensive. For instance, under Concrete we can include both what we perceive, and what we infer, as being both material and immaterial; such as, Bodies, as well as God, Soul, or Power; but this cannot be said of Perception. Yet, if we make this exception, we shall find Perception and Conception the more useful and significant terms; and I shall therefore generally use them, from preference, throughout this work. As the point of view, in which these two sets of terms are employed, is quite different, we shall find, that if we attempt to include such immaterial things as God, Soul, or Power under Perceptions or Conceptions, it must be under the last, as they are only discovered by inference; for all Inferences, Phrases, Opinions, Conjectures, Notions, Propositions, Statements, Arguments, &c. (§ 30.) are strictly Conceptions. It is, therefore, worthy of remark, that the term 'Conception' has here the advantage over that of Abstract Terms; and, thus, more than balances that possessed by Concrete terms over Perception. Both sets of terms will, therefore, be found occasionally preferable the one to the other. Conception admirably represents both Abstract Terms, as well as the Inferences, Phrases, Opinions, &c. which have been just enumerated; in short, every thing we have already heard or conceived of ourselves by the means of language, and which are treasured up by memory;—a proof how much of the highest intelligence depends upon this faculty, which is the very basis of thought, and without the possession of which, in a high degree, no man can shine as a just and profound reasoner. An examination, indeed, of the most original productions of the human mind will show how much they are dependent upon preconceptions⁵: and if this is the case with them, the discourses of ordinary minds will appear to be little more than parrot-like repetitions, slightly modified for the occasion.

⁽⁵⁾ See the Note to § 85.

OF THINGS.

§ 4. I have already said, that Concrete Terms relate solely to what is made known to us by our senses, or by indubitable inference. But, besides these, there are many sensations which we are almost invariably in the habit of mistaking for the things which produce them. Thus the sensation of heat is commonly mistaken for the something which excites it; and this is fully felt and acknowledged by chemists, and other writers on natural philosophy, who have consequently been obliged to introduce the word *caloric*, to prevent the confusion of thought that must follow from the use of the word heat in two opposite senses: but no one appears to suspect that the same kind of mistake is made with regard to light, though such is the fact. All the beautiful illumination, seeming to be caused throughout nature by the sun, is but a sensation; and if there were no eyes in the world, every thing would be dark; yet that which produced the sensation of light in us would still remain. When we say we see a light, or a flame, or a colour, we make the same mistake as the person who thinks heat and caloric to be one and the same thing. So does he, who supposes that what makes the air vibrate is the

sound he hears; and, he who thinks that the odour he smells is identical with that which passed from the flower he holds in his hand, or that the taste he relishes so much is in the morsel he is pressing against his palate, falls into a similar error. These subjects are merely alluded to here, that the reader may not commit the mistake of classifying under Concrete Terms, what are really Abstract: for Sights, Tastes, Smells, Sounds, and Feelings, are all Abstract Terms; and the things that produce these effects on our senses, whether they be material or immaterial, are alone represented by Concrete Terms. This is as much as I believe it is necessary to say on the subject of what is Concrete; and I shall therefore proceed to the next division of the inquiry, namely, to Abstract Terms, which are all included under the word State.

OF STATES.

§ 5. Every Abstract word implies either a State or an Action. Thus, goodness is the State of a man who is good, that is, a good-man's-state; and vibration and movement are Actions of bodies which vibrate and move. If any one wished to generalize further, he might say that all Abstract Words imply a State; for we can speak of a state of action, and so talk of THE STATE of vibration, or the state of movement of a body, still the distinction will be found to be useful in practice, as will be seen when I show what Abstract Words are in reality: but I must first recal the reader's attention to the way he has been in the habit of employing them. He will remember, that he talks of goodness, virtue, and other Abstract States, as something as palpable as the class of Concrete words already alluded to; and he accordingly says, when occasion requires, in goodness, from goodness, BY goodness, &c., just as he would employ in, from, By, &c. in speaking of a house, or any other tangible object: though I shall shortly prove to him, that this indispensable and necessary use of language, in the common business of life, is the root of the most glaring fallacies, when we have occasion to reason on the fundamental principles of things in general.

§ 6. Having thus far introduced the reader to this branch of the inquiry, I wish to inform him, that it is my intention to show, that though we can TALK of goodness, virtue, blackness, whiteness, &c., we cannot THINK of them. If any one will take such a word as goodness, and decompose it, he will find it to contain good and ness. If he will do the same for other compound words implying a State, he will always find that he has an adjective, and an unmeaning termination⁶. In a similar manner, any word implying an Action, such as movement, may be reduced to the verb move, and to ment, a syllable of no sense. Hence it is clear that any word implying a State is derived from an adjective, or a verb neuter; and every one signifying an Action, from a verb active. Nearly every word in English ending in tion is derived from a Latin verb, and the termination tio⁷, which is void of sense. We thus see that

⁽⁶⁾ The apparent significancy of such terminations as ness, ship, hood, head, &c., will, if they are referred back to their original forms, be found to be quite delusive: for instance, ship does not mean a vessel, nor head the upper part of the body; and so of the rest.—See this subject further pursued in Note (A).

⁽⁷⁾ Some will perhaps prefer restricting the termination to io, instead of tio; as the abstract nouns formed with this affix always incline in their formation to that of the past participle, and not to the present tense. For example, secretio, actio, &c., are more connected with secretus, actus, &c., than with secerno, ago, &c. The reader can choose which form he likes best: my object, on the present occasion, is not with etymology, but simply the elucidation of a general principle of language, for which I endeavour to find the readiest means.

these States and Actions have no existence, except as words; and, consequently, that there are no such things as abstract ideas, but only abstract words. Did Abstract Ideas exist in the mind before such terms were brought into use, we must equally admit that it had in it the Ideas of saltness, sandiness, sponginess, ropiness, and similar words, before we knew of salt, sand, sponge, rope, or any other thing we may in time discover, or fabricate. Should this assertion, that we only employ Abstract Words, and have no Abstract Ideas, create a doubt, let any one try to form to himself the Idea of saltness, sandiness, sponginess, or ropiness, without any reference to salt, sand, sponge, or rope: and, if he still fancy that he can, let him try to conceive the Idea or image of these qualities, without calling to mind the sounds that express them, or the things from which they have been abstracted. He will, I believe, discover this to be impossible: and, to prove that there is no fallacy at the bottom of the assertion, let him, by way of contrast, try to call to mind a house, a horse, a dog, or any other object that has been made known to him by one or more of his senses; and let him do this without any reference to the names they bear in his own or in any other language; and he will, I think, find that he can do it without any difficulty. His dreams, too, may be called in to the proof of this fact. In them, he sees and feels such things as he may have seen and felt in his waking moments; but his Abstract Ideas have disappeared, though no one will deny but that it is quite possible to dream of salt, sand, a sponge, a rope, &c. It is no doubt very startling, to have this fact brought home to us, perhaps for the first time; nor can such a rooted prejudice—that is, an opinion founded before judgment has been exerted—be at once eradicated from our minds: but it is only nenessary for any one to consider it with the attention it merits, and he will not fail, however liable he must be, from habit, to continual relapses, to feel its full force.

§ 7. Let the reader, therefore, never forget, that all Abstract Terms must come under the same law as saltness, sandiness, sponginess, ropiness, &c.; and that if these must be admitted to have arisen after the knowledge of salt, sand, sponge, rope, &c., so must all others be equally dependent upon the knowledge of some previous concrete thing to which ness, ship, hood, &c. have merely been added. Those, therefore, who hold out for Abstract Terms, that is, who are realists, must be prepared to defend saltness, sandiness, &c., or to surrender up every Abstract Word employed in language; for they must, one and all, stand or fall together; and this fact must never be lost sight of, throughout the following remarks.

§ 8. As to such simple words as cannot be decompounded, they will be found to be either adjectives used nominally, as a good, a white, &c.; or they are verbs, such as a run, a knock, a jump. When such words are brought into use by convention, they are understood with the greatest facility in their new character; for if the language possess an article, the placing of it before any term is a signal to the understanding of the new office the word is meant to fill: and if it have not this defining particle, the prefixing a possessive pronoun, or a noun in the genitive case, will at once cause the mind to class the word with other nouns, as in such examples as his run, his knock, his jump, &c., or a MAN'S run, a MAN'S knock, &c. By this process any verb may be converted into a noun, as we see in such expressions as HIS flat, HIS fac-simile, &c.; and the intention of the speaker is comprehended, even by a child, at the very first employment of such Terms. A fact that throws some light on the facility with which we comprehend forms of speech we may not have heard before;—analogy being, in all such cases, the leading-string of the understanding. But it may be objected, that there is in English, and, perhaps, in most other languages, many words which cannot be either decompounded, or traced to their originals. This is undoubtedly true; but they will be found to be words of the first necessity in language, and for which the compound form can be generally substituted, as in the case of heat and hotness in our own language, and of vita and vitalitas in Latin. But, though we are now unable to trace such words to their remote etymons, their existence can in no way impugn the force of the observations already made; for the demonstrative clearness of the real nature of such as we can trace, leaves no doubt respecting those of the same class which are obscure.

- § 9. It must be evident, that in all the foregoing examples, and also in all others that can be produced, we might, with equal certainty of being understood, particularly after a little use, have substituted the word State, and thus have got rid of the whole multitude of Abstract Words; and, instead of speaking of goodness, virtue, vibration, movement, &c., have talked of the good-state, the virtuous-state, the vibrating-state, the moving-state⁸, &c. Had this been so, we could not have been deceived, as we now are; for whenever we made use of the latter expressions, we should never have been led into the error of supposing such words as goodness, virtue, vibration, movement, &c. as having a real existence; which
- (*) The reader will observe, that it would be as unnecessary, as incorrect, to subjoin the word Action to an active verb, and to speak of the *vibrating action*. Here, the generic term State is the right word; but, if we substitute *vibratory* for *vibrating*, that is, the adjective for the participle, we may then speak of the Vibratory Action; because no adjective contains in itself any reference to Action.

is the case, at present, with all reasoners; and even with myself, as often as I speak without calling my mind, by an effort, to the consciousness of this fact. One decided advantage which must have resulted from this last and more philosophical employment of the forms of speech, would have been, that where we spoke of the good-state, the virtuous-state, the vibrating-state, the moving-state, &c., we must in every instance have referred these States to some individual. or to a body in which they were conceived to exist. But, as it is, we make real and independent entities of these Abstract Words; and they are as much a stumbling-block to the right use of reason, (when their real nature is not remembered,) as were the quiddities of the schoolmen. But here arises the obvious and important question, namely, if all Abstract Words can be traced up to be the State of some thing, how did mankind arrive at the word State, or such other terminations, significant or otherwise, that are its equivalent: for State, in our language, is the generic term for actions, acts, results, relations, qualities, properties, offices, &c.? To this, the answer is, that the reason has already been partly given, in what has been said of the manner in which any word can be instantly made to pass for a noun by prefixing an article (definite or indefinite) to it; or by employing a possessive pronoun, or its equivalent, a noun in the genitive case. This, however, only shows how we are enabled, by analogy, to refer

all other Abstractions to a class already established; but does not explain by what process the mind came originally to use an Abstract Term. This part of the question, therefore, deserves to be treated more fully.

§ 10. If we attentively consider language, we shall find, that without the aid of Abstract Terms we could never carry on a connected chain of reasoning. Children, who in general, up to the age of eight or ten, are extremely sparing in the use of such words, are not capable of reasoning at any great length; and their longest discourses are confined to narrations. Among all races of men that we know of at present, Abstract Words are in use; but, of course, much more sparingly in proportion as their minds are less cultivated. Hence we see that it is a universal principle of our nature to have recourse to their aid: indeed, we should be but as little children, in thought, without them. I have already shown, that it is by analogy that we class any new Abstract Term with those we had previously acquired: it was by the very same process that we classed the first Abstract Nouns with those that are Concrete. This was one of the noblest steps in language; for which it effected what the invention of Algebra did for the science of numbers. while it gave man an almost unlimited power in reasoning on common subjects, it led him into the grossest errors, as soon as he began to reflect on the

nature of the things he *supposed* to be represented by those very Abstractions.

§ 11. The term State we have received from the Latin language; in which it, and a very large class of similar words, have the same termination in the nominative case as the past participle. Thus, in the Saxon portion of our language, past participles are used as Abstract Nouns; as, for instance, the word stroke, derived from to strike; so in French, destinée is a past participle, employed for the modern notion of fate. It is therefore evident, from the universality of such substitutions, that we are driven to their use by the very frame of our intellect. But when we have traced every Abstraction to a State, and, being unable to go higher, demand of ourselves what we understand by the term, we shall be brought to see how mysterious the nature of language really is; and with what a delicate tact we must pursue the inquiry, if we hope to arrive at a just conclusion. In Latin, the word status must, from its derivation, have originally implied a standing or station; and in Greek, STASIS is not merely synonymous with the English and Latin, but the three languages all derive the word from roots of common origin, meaning to stand. In the cognate and copious Sanscrit, the word sthits might, by its derivation, be expected to express the same meaning; but it is rather used in

⁽⁹⁾ Στάσις.

that language with the sense of stay, staying, &c.; and for the signification of State in its Abstract sense, the word bhavas, implying existence, nature, derived from the root bhu, meaning being, or to be, is preferred. In the Arabic language, State is expressed by the term hal; which originally meant a turn, being derived from hawala, it revolved.

§ 12. If we consider the foregoing words with attention, we must be convinced that, of them all, BHAVAS is not merely the best, but the only one which is the philosophical representative of what nature intended: for if we ask ourselves what is the real sense of State in such phrases as the state of things, the state of action, &c., we must feel that we mean the existence (being-ness) of things or action. Here, again, we are compelled to ask ourselves what is intended by Existence; and then we find we have got to the utmost bounds of human thought, and that Existence implies THE STATE OF THAT WHICH IS; an answer completely in a circle, that demonstrates that we can go no further. It is obvious, that that which is, is nothing more than what is made known to us by sense; namely, Existence; that is to say, visible nature. Now, it is impossible that man in his primitive condition could have felt the force of these conclusions, and that, too, before he had the very instrument with which he could have arrived at them; namely,

language. This inevitable inference must convince us, that we must look to some other reason, that will account for the universality with which such terminations, as are the representatives of State, namely, ship, hood, ness, &c., have been brought Previously, however, to entering on this point, it must be remembered, that the word State, which they all represent, is itself a mere fiction: for though we can think of something standing, or that has stood, yet the use of either of these two expressions, or of State, as a reality, is merely a bold and daring assumption of the intellect. This is the grand point to which I wish to draw the reader's particular consideration; nor can I hope that any thing I have said, or have to say, will be comprehended in its true light, till he has mastered this point: for though I may possibly be able to supply him with food for his thoughts, the profitable nourishment of his mind must depend upon his own efforts and the degree of attention which he bestows To borrow an expression on what he reads. employed by tyros, in Euclid, the present is "the asses' bridge" of Metaphysics; and every exertion should be made to pass over it cleverly, however uninviting it may appear at first sight. Let him reflect, therefore, that the understanding, being deficient in what would enable it to reason fluently, and feeling itself arrested in its course by the want of something that should correspond to the real things

in nature, made known to it through the senses, is led, by the very frame of the intellect, to make this jump; the necessity of which is abundantly proved by the fact, that the same effort has been made by mankind in every condition in which they have been found, that they might be able to say, in a fright, in a hurry, &c., as they would, in a field, in a house, &c. This otherwise inexplicable fact points out to us, in conjunction with what I have already said, that the terminations ship, hood, ness, &c., as well as their corresponding representatives in other languages, never did mean State or existence; and that if they ever had any meaning at all, it was entirely superseded by the new use to which they were applied. That this is highly probable, is evidenced by the circumstance, that those words which are derived from verbs, such as sleep, anger, love, &c. all contain, covertly, to our understandings, the force of State; for we can in each case substitute for them the sleeping-state, the angry-state, the loving-state¹⁰, &c., without the least danger of being misunderstood; and that, too, though the form of expression is not usual. If, therefore, as I have said, these terminations never did mean that for which they now alone stand, it is the nature of our intellect that leads us, by a sort of instinct, to their use; just as the nature

⁽¹⁰⁾ In the Chinese language, position determines the office any word is to fill. An Abstract Word, therefore, is merely known by the place it holds in the sentence.

of the equally helpless infant guides it unconsciously to seek for nutriment from the mother's breast.

- § 13. Having done all I can to explain the nature of the word State, which is the very basis of all Abstract Language, I now proceed to make a few remarks on the consequences that result from language being both simple and Abstract; and, which fact having been quite overlooked, or neglected, has given rise to the grossest errors, even among the most profound thinkers the world has ever produced.
- § 14. All language, then, has two forms of expression; the one simple, the other Abstract. Children always employ the first; and those who reason much, almost invariably the last—if it be possible to do so. Thus, a child would say, Alexander is good; but the Abstract reasoner, in all probability, would praise the goodness of Alexander. There is scarcely a short proposition that cannot be expressed in Concrete as well as in Abstract Language; but it would be impossible to put together a sentence of a few lines without some direct or covert use of Abstractions. Even the words when, where, how, &c. are only elliptical forms of phrases in which an abstraction exists: WHERE means, in what place; when, in what time; How, may mean what degree, manner, reason, cause, or means; and the same remark may be applied to all

other adverbs. Language has made considerable advances to perfection before such words as when, where, &c., are made the representatives of phrases. reader will now remember, that there are two modes in which he may express himself; namely, the simple one of children, and the more abstruse one of dialecticians. Both are more or less used on all occasions, however, by every one; and if every author's style were analysed according to this division, it would afford a singular appearance of incongruity. the most remarkable circumstance is, that the combination of the two produces a singular confusion and jumble in our reasonings, and is the fruitful source of error; as will be evident by referring to the passages quoted from Algazel and Hume, in §§ 80, 85, 86, 88. Even the sagacity of Newton committed the same mistake: for, when he accounted for the reflection of light by supposing that its particles were reflected (bent back) from their direct line by attractive and repulsive forces, (which he conceived to reside in all material bodies, and a little beyond their surfaces,) he fell into the common error of mixing that which is concrete (light) and Abstractions (forces) together. Had any one asked this most cautious of philosophers what he meant by these attractive and repulsive forces, Newton would at once have felt that he had turned mere States of Being into realities, and had thereby begged the whole question:—that the same is done by all other

mathematicians will not, therefore, excite surprise. See §§ 120, 123, 147.

§ 15. The main object of this inquiry is, to show that we ought to learn to put their just value on Abstractions, but never to forget that they are but Terms; and, that to fully comprehend what they really are, we must become like little children, in the use of language, and restore every Abstract Expression, we are desirous to analyse and understand, into that form in which a child would employ Thus, when we speak of cohesion, vibration, &c., we must refer them to the things in which they alone have an existence, namely, to bodies (solid, fluid, or aëriform); and then we shall discover, that all we can say, is, that bodies cohere, vibrate, &c.: but as for those creations of our fancy, called cohesion, vibration, &c., they have no existence, except as sounds; and have been solely brought into use that we might not be arrested in our course of reasoning, but be able to say, by, through, with, in cohesion, vibration, &c.; just as we say, by, through, with, in a house, field, &c. It is by these most useful non-entities that we are enabled to make our discourse, as it were, of one piece: but, unhappily, we have so far deceived ourselves in so doing, as to make that which refers to something real, and that, which though it puts on the mask of reality, means nothing, but by an unconscious and remote reference to the word from which it is derived, of precisely the same value. These Abstractions serve the same purpose in thought that eiphers do in calculation: they are but signs of a conventional value, and bearing a given relation to one another, which the intellect feels by a peculiar tact with which it is endowed, and which constitutes the thinking principle. To assign the means by which it is enabled to do so, is as impossible, as to comprehend the nature of the memory by which such signs are preserved for its employment.

§ 16. In drawing the reader's attention so strongly to the question of Abstract Terms, I do so from the conviction, that nothing but a constant vigilance of mind can prevent us from being misled by what we have been accustomed to consider, from the dawn of reason, as something real; and which is only inconvenient, as in the present case, when we would raise the veil of nature, and penetrate into her inmost sanctuary. For such is the force of habit, that the delusion of language, in which we have been nursed from our infancy, and which, in fact, from its universality, being found in every class of men, literary and illiterate, and every state of society, civilized and savage, we may consider as one by which we were intended to be deluded; and from which we can only release ourselves by an occasional effort of reflection, such as I am anxious to effect, on the present occasion, in the mind of the reader. He ought,

therefore, not to think this inquiry either useless or irksome; as I shall have often to remind him of the necessity of bearing in mind the neglected truth it enforces; and he will be fully conscious of its value, as he proceeds.

§ 17. When we ask ourselves what we mean by Abstract Terms, it is clear, that if we have not previously reflected on the subject, it will require a little effort to discover that they must imply States of bodies; but not any thing which we can handle, or discover by the means of our senses. Again, if we ask ourselves what are the States of bodies, we must immediately perceive that they are forms of speech. These Forms of speech, therefore, which we call States, Relations, Qualities, &c., could never have had any existence, but for the aid of language, either oral or written. Thus, if we saw a White horse, we could never separate, or abstract from it, the idea of colour. All this we can do by the help of language, and we can talk (but not think) of Whiteness without reference to any object whatever. It is evident, therefore, that there is no such conception in the mind as that of Whiteness, or any other colour or quality separate from the image of some object in which it is found; and that such words are merely symbols which we employ to reason with, and that they are consequently simply conventional terms. When, therefore, metaphysicians speak of Abstract

Ideas, it is evident that they make use of a Term that has no meaning, because such words denote nothing that has any real existence. If, then, we wish to have a definite notion in the place of what is called an Abstract Idea, we must find the Concrete Image from which it is drawn or abstracted. For instance, to understand what is meant by Whiteness, I think of a swan, snow, or some other object which is commonly White, and I have then a clear conception of that colour: but even then I cannot separate it from the thing with which it is conjoined; and I consequently discover, that every Idea I have, is one which, to exist, must have a Concrete, that is, a Real existence in nature; and that when I talk of a General or Abstract Idea, I do so in compliance with common usage; for a General or Abstract Idea is the same as no Idea at all. To feel the immense importance of this conclusion, let us remember, that when we speak of extension, length, breadth, &c., which are commonly called Abstract Ideas, to understand what they really designate, we must call up the Image of something that is extended, broad, and *deep*—as a *lake*, for instance. Now, these words have, by the foregoing reasoning, no existence whatever, not even mentally; being mere symbols, preserved by the memory for the purpose of reasoning.

§ 18. Some may suppose, that, after the fierce discussions that raged among the schoolmen under

the names of nominalists and realists—which began at the commencement of the twelfth century, and only terminated with the new subjects of difference that were engendered by the Reformation—it must be unnecessary to allude to a subject that has ceded to the general feeling that the realists were in error; and that, as a consequence, all, or nearly all, are of the side of the nominalists, and therefore believe that these Abstract Words have no reality in themselves. Could I believe that all those who laugh at the most glaring of the absurdities of the realists were truly nominalists, and, as such, reasoned consistently according to this opinion, these remarks had doubtlessly been spared, as unnecessary. I believe the matter of fact to be quite otherwise, and that every man is, by nature, by practice, and by habit, a realist: and for the truth of this assertion, I appeal to the effect the foregoing remarks have produced in the reader, be he a professed metaphysician, or merely a lover of metaphysical disquisition. It is, therefore, with the view of correcting, if possible, this natural bias of the mind, that I have taken the pains of making the matter as simple and clear as I can. The nominalists, including their leader Roscellinus, and their later advocate, our countryman William of Ockham, have left the subject still in dispute. The general arguments for and against the belief of General Ideas were insufficient to convince either side, - a result, I think, that could hardly have followed, had the nominalists attempted the analysis of the terms by which such Ideas are supposed to be represented. This effort would have been the experimentum crucis, that would not merely have silenced their opponents, but their doing so would have conferred a lasting benefit on philosophical investigation. They should have done with General Ideas as Saint Thomas Aquinas did with the dread-inspiring automaton of Albert the Great, and with one blow have proved their artificial origin by laying open their internal structure: this would have destroyed their magic influence for ever .-Roscellinus, though the first among the moderns to broach the notion, seems to have come nearer the exact truth than Ockham; as "he maintained, with respect to the General Ideas of genera and species, that they were mere sounds (flatus vocis), by means of which we denoted the common qualities which we observe among the various individual objects." But Ockham considered, that "though they had not a subjective, they had an objective existence in the soul"." But to have made the matter quite clear, Ockham and his followers should have shown what this mysterious process of Abstraction is; namely, the manner in which such Ideas are formed. he attempted this, he would have been obliged to have substituted the word term for Idea, and thus

⁽¹¹⁾ Manuel de l'Histoire de la Philosophie, traduit de l'Allemand de Tennemann, par V. Cousin, Tom. I. §§ 249, 270.

have put an end to the controversy. He would only have had to show, that such words as rope, stone, &c., might be altered into ropy, stony, &c., and, by a further process of sublimation, converted into ropiness, stoniness, &c., by the mere addition of the unmeaning syllable ness; and thus have brought down, what they called, Philosophy, from her stilts, to the level of the human understanding; showing her to be little more than a shadow, tricked out in the gorgeous apparel of high-sounding but empty words.

§ 19. The Realists would certainly have been thrown into great difficulties, if science had anticipated its course, and appeared in their days with the Generalizations, Divisions, and Sub-Divisions of modern times. If they could not settle the question, whether a Genus had a real existence or not, what would they have said to the higher Generalization of Genera into Orders, and of these again into the remoter one of Classes? But in all such disputes, the human intellect appears to be spell-bound for a certain period; and being unable to pass over the narrow eircle it had marked out for its own activity, is driven round and round, without the possibility of making a single movement in advance, till it is all at once set at liberty from its folly by some new absurdity, which, in its turn, becomes the subject of those bitter contentions that seem neces-

sary in human affairs to create that degree of interest which shall prevent a stagnation of mind. That classification is a purely artificial process would seem to be sufficiently obvious. We begin with the *Individual* or *Variety*, as John, Fohi, and Obi, among men; for every Individual is strictly a Variety: we ought, then, to class these into Species, as the bearded, the beardless, and the woolly-headed race. We then see that they likewise have a certain general resemblance; and we collect them together, under the term Genus, which we call homo or man. Afterwards, we find we can go beyond this; for certain Genera have a remote relationship: so we connect them under the word Order, and call them Primates: and, finally, we carry our Generalization to a climax, by placing all these Orders under a Class, to which we give the name of Mammalia. The distribution of Species into Sub-Species, as is done in some cases, is a proof that such classification is not quite correct. It seems to have been formed inversely to the true order; that is, by beginning with the class, and descending to individuals or particulars. That which is now called a Sub-Species should have been species, as the first generalization of Individuals or Varieties; and what are called Species should have been termed Genera, &c. It has been well remarked by an eloquent writer¹², that

⁽¹²⁾ Cours de l'Histoire de la Philosophie, par V. Cousin, Tome I. Lecture 20.

it is not language, however complete, that will render science perfect; but science, when it is completely constituted, that will perfect language. But, with regard to the particular question of Abstraction, the reader must see that mankind are habitually in error, and that nothing but a careful effort can release us from its delusive influence. Were we to hear of any one who in summing up the figures that represent so many things—apples, for instance—of which he was anxious to know the amount, should so far delude himself as to suppose the figures were really apples, we should be certainly warranted in pronouncing him insane. What shall we say of ourselves, however, when we consider mere sounds to be real things? In the case I have just put, the madman has really something before him which he merely mistakes; but in our own case, we cannot even assign the things that we think are represented by our sounds. If we judge the man to be mad who should mistake the figures for the fruit they represent, we must surely admit that we, at the least, are most unreflecting, in supposing that the words which we employ merely as signs in reasoning, are the representatives of things called Ideas, that never existed.

§ 20. I think I cannot produce a more appropriate specimen of the effects of *realism* on the most acute minds, than will be found in the following

extract from a Hindu metaphysician, when discussing the opinions of other writers about nature: -"According to some, 'time is cause; time is the five elements; time destroys the world; time watches when all things sleep; time is not to be surpassed.' There are but three categories, the discrete principle, the indiscrete principle, and soul; and by one of them time must be comprehended. Time, then, is a discrete principle; for nature, from its universal creative power, is the cause of time; spontaneity merges into it (nature); and time, therefore, is not cause; matter is spontaneity. Nature alone, therefore, is cause; and there is no cause of nature". 13 This subtle reasoner never once suspected that time and spontaneity are mere Abstractions, and that in the use made of the former it is actually personified. The instance is very valuable, as it shows how deeply rooted and universal this fallacy is in the human mind; and how much mankind have been deceived by language; as well as what a small chance exists of escaping from its delusions. Examples equally glaring might be produced from the most eminent metaphysicians of Europe. Such paralogisms as

⁽¹³⁾ Sankhya Karika, p. 173; a work of great interest, as well as antiquity, and admirably elucidated and edited by my friend, Professor Horace Hayman Wilson.—This work having been published by the Oriental Translation Committee of Great Britain and Ireland, is now accessible to every one who takes an interest in the history and progress of the human mind.

these, however, have been dignified, from the most ancient times, as profound philosophy; and though the novice in metaphysics is confounded when he looks into metaphysical works, and feels reasonable doubts respecting such reasoning, he naturally attributes his imperfect comprehension of what seems so consistent, to his ignorance or inaptitude for disquisitions of so abstruse and recondite a nature. The truth of this assertion will be rendered evident by the remarks made upon Hume (§§ 85, 86, 88).

- § 21. The effect of Realism on our minds, in leading us to convert these airy nothings into entities, cannot be more plainly exhibited than in the universal use of them as faculties of the mind. Thus we speak of our Will, our Judgment, our Fancy, our Imagination, our Understanding, &c., as realities that form part of our intellect; though we can, in truth, only say that we, that is, our intellectual nature, wills, judges, fancies, imagines, understands, &c. But this subject is of too much importance to be more than alluded to here; and it will, accordingly, be more appropriately considered hereafter. (See §§ 156—163.)
- § 22. Among the most striking instances of the influence of Realism, the reader need only be reminded of the deification these Abstractions have met with in antiquity. Statues, temples, and alters,

were raised to Youth, to Beauty, to Truth, to Virtue, to Cheerfulness, to Sleep, to Madness, to Fury, &c., without the slightest suspicion being entertained that their votaries were merely honouring so many conceptions of their own brains, and thereby offering a tribute to their love of the beautiful and the good; or that by such acts they endeavoured to avert from themselves the calamities implied by some of the most appalling of these words. In India, even at this period of the world, we find that the Hindus, whose religion and language bear so remarkable a resemblance to those of Ancient Greece and Rome, consider every epidemic as a malignant deity, that must be propitiated by religious rites; and small-pox, measles, cholera, &c., are served as gods who can be made to bend from their wrathful purpose by proper offerings. How many there are in these days that would start at the reproach of heathenism, who would be the first to reprove those who should bend to a stock or a stone; and yet who are momentarily in the habit of making a few articulate sounds the gods of their idolatry, by referring all the mysterious operations in nature to a few words of their own creation! These are not, to be sure, gods that they have made with their own hands; but they are idols they have formed with their tongues, and which they substitute, on all occasions, for the Author of Nature, by referring every result

exhibited in the working of this universal frame to Attraction, Affinity, Cohesion, &c. Like children at a puppet-show, who never ask how the puppets are moved, they would seem, by their silence, never to raise their minds to an inquiry as to the agents that are equally necessary, in both cases, to put all in motion, even though they be hidden from sight. They appear content with what satisfies them for the moment; and would, in all probability, take it extremely amiss, or perhaps as irrelevant, that any one should inquire what is meant by these terms. Words similar to these have satisfied their predecessors as well as these do themselves; and they have likewise received the sanction of great names; though these have given way, in succession, to those of some more fortunate rivals, which are in their turn to make place for others. Such are, and ever must be, the consequence of not examining for ourselves the words, or instruments of thought, with which we measure all things; and of blindly following those who have themselves received their first notions in science without any effort of reflection, and who think it enough that the master has said so.

§ 23. Perhaps few subjects will show better the strong hold that Abstractions have upon our nature, and the influence they exercise over our minds in the conduct of life, than our attachment to such things

as the Church, the State, the Constitution, a Principle, &c. When we ask ourselves what we mean by these terms as objects of affection, we shall at once be brought to see how much we are swayed by mere words. Not one of them designate any thing that has a real existence, except as a sound: still, we are ready to sacrifice our lives for them at a moment's notice. Indeed, a consideration of this question will lead to the belief that language itself is a main part of what we call by the name of mind. (See §§ 156-163.) Without language, not one of these conceptions would have had an existence; nor could one drop of the torrents of blood, that have flowed from such causes, have been shed. I fear that the truth in these cases is, that man is but too fond of any motive that may afford a plausible pretext for letting loose, in what may be considered a legitimate way, the bad passions that belong to his nature. The demon of War, and its civil representative, Persecution, are ever dear to his heart; nor can he, on any occasion, while these favourite modes of gratification present themselves, deny himself the pleasure that attends their indulgence, except they are silenced by their arch leader, Avarice, and her base, but legitimate offspring, Lucre. Nothing but the hope of gain can tempt him to cultivate the arts of peace, and turn his sword into a sickle. Unfortunately, however, when the love of gold has become the ruling passion of any community, from that moment every generous and noble sentiment is extinguished, and neither wisdom nor virtue possess any power in their own right.

§ 24. The atrocious conduct of Calvin, in causing Servetus to be burned alive—though he was himself a Protestant reformer, who vindicated liberty of conscience—is a modern, and a melancholy instance of the truth of the foregoing remarks; and leads to more than a suspicion, that the toleration so earnestly inculcated by Arminius was little more than a pleading for exemption for himself and followers from fire and fagot. The same germs are universal in human nature, and require but favourable circumstances for their growth. Though the dispositions of men may be different, yet religious zeal and fanaticism have a strong tendency to bring all to an equality, when their feelings are once roused into activity; but particularly in what they are taught is a good and holy cause. The history of all ages will confirm this fact. Heretics were first burned in England, by Henry IV., to please the bishops who had assisted him in dethroning Science has been accused of pro-Richard II.14 moting irreligion; but after these, and similar examples, it may be safely asserted, that the mild

⁽¹¹⁾ Walpoliana, Vol. I. p. 78.

spirit of the Gospel, which inculcates *Peace on earth, and good-will toward men*, has been essentially served and benefitted by pursuits which have smoothed down the asperities of our nature, and enabled the mass of mankind to re-act on such of their religious instructors as had forgotten that Christianity is a religion which enjoins every man to *love his neighbour as himself*.

§ 25. If the abuse of Abstract Terms has a baneful effect upon philosophical investigation, we must never lose sight of their extreme value in the ordinary use of reason. Here, indeed, it is impossible to be too grateful for their existence; as they exalt man even above his own exalted nature, giving him a sort of unlimited command over the past, and, in some respect, over the future also. If, through them, he has been successively swayed, and led to entertain doctrines, opinions, and theories which have been noxious to his well-being, it is by their aid, and that of letters, that he discovers whatever may, under the guidance of reason, be conducive to his present and future happiness. It was with a general feeling of this truth, which few will, I believe, be inclined to question, that I uttered the following sentiment some years back: - " Those Abstract Relations, in proportion to the extent and accuracy with which they are comprehended by any individual, raise him, in the scale of reason,

almost as much above the rest of mankind, as man is elevated above the brute." ¹⁵ But if the tendency to Realism is one of the injurious consequences of using Abstract Terms, it cannot but be admitted, that the personifying such words is one of the finest resources of fiction. Here, at least, we are not misled, but enter willingly and consciously into the pleasing delusion. Not only are Abstractions some of the choicest ornaments of Poetry, but, when personified, give it an animation and a movement that leads the understanding a willing captive to the inventions of Fancy. Its fascinating effects must have been felt by every lover of the Muse; and before I bring a few examples by way of illustration, I must remind the reader of the celebrated opening of Rasselas, where a writer of remarkable gravity and severity has employed it in prose with the happiest effect. In poetry, it constitutes the riches of every language that by its genius admits of its existence. Though Shakspeare has been sparing in this figure, he may be quoted for some charming instances; as when he says—

——" She never told her love, But let Concealment, like a worm i' the bud, Feed on her damask cheek: she pined in thought; And with a green and yellow melancholy, She sat, like Patience on a monument, Smiling at Grief."

⁽¹⁵⁾ A Short Inquiry into the Nature of Language, prefixed to the Author's Bengali, Sanscrit, and English Dictionary, p. vii.

And again:-

" Night's candles are burnt out, and jocund Day Stands tiptoe on the misty mountain-tops."

And in the following instance:-

- "Grim visag'd War hath smooth'd his wrinkled front."
- § 26. The personification of Sin and Death in Milton's Paradise Lost is too well known to require to be more than alluded to; but the following passage, from the same poem, may be adduced as an example of the aid which genius derives from this figure of speech:—
 - ——" When strait behold the throne
 Of Chaos, and his dark pavilion spread
 Wide on the wasteful deep! With him enthron'd,
 Sat sable-vested Night, eldest of things,
 The consort of his reign; and by them stood
 Orcus and Ades, and the dreaded name
 Of Demogorgon, Rumour next, and Chance,
 And Tumult, and Confusion, all embroil'd,
 And Discord, with a thousand various mouths."
- § 27. But of all our best Poets, none, with the exception of Spenser and Collins, considering how little he has written, has oftener employed personification than Gray. The following lines are from him:—

"These shall the fury passions tear,
The vultures of the mind,
Disdainful Anger, pallid Fear,
And Shame that skulks behind;
Or pining Love shall waste their youth,
Or Jealousy with rankling tooth,
That inly gnaws the secret heart;
And Envy wan, and faded Care,
Grim-visag'd, comfortless Despair,
And Sorrow's piercing dart.

Ambition this shall tempt to rise,

Then whirl the wretch from high,
To bitter Scorn a sacrifice,
And grinning Infamy.
The stings of Falschood those shall try,
And hard Unkindness' alter'd eye,
That mocks the tear it forc'd to flow;
And keen Remorse, with blood defil'd,
And moody Madness laughing wild
Amid severest woe."

§ 28. Collins's Ode on the Passions is too well known to require more, after the instance just given, than to be recalled to the reader's remembrance, as affording one of the most complete and perfect instances in our own, and perhaps in any language, of the happy and vivifying effects of personification.—Its use in allegory has often been had recourse to; and the well-known Choice of Hercules, from the Greek of the celebrated sophist

Protagoras, may be quoted as one of the most felicitous efforts of genius in prose composition, directed to a great moral end. The poem of Cupid and Psyche, by Mrs. Tighe, is a most delightful production, abounding in such soft and tender graces as could only spring from the gentle and delicate mind of a female. Bunyan's Pilgrim's Progress, as an allegory in prose, exhibits what may be effected by the enthusiasm of untutored genius, when it concentrates its efforts in solitude, and works in the rich mine of the imagination. The writer, trusting solely to his native strength of intellect, and to but one book, which he had made the sole object of his waking thoughts, during the most energetic period of a life that had been roused into activity by all the opposing elements of persecution and injustice, has produced a work of such unrivalled merit in its class, for originality and invention, as must make it a popular favourite, as long as the English language is understood, or its literature valued.

§ 29. It now remains only to say, that all we have at any time to talk or think of may be summed up by the terms perceptions and conceptions. To the first belong all objects we perceive, when we see, hear, smell, taste, or touch. To the last, all the Combinations, Relations, and other States of the objects or things we perceive, and of which we are

enabled to think, or conceive, by the mysterious operations of the intellect, aided by the almost equally mysterious mechanism of language, which it had previously prepared by and for the process to which we give the name of thought. To this last class must likewise be referred those essences which we derive by strict inference, when we observe the design, harmony, and operations of nature, such as God, Soul, and Power. The two most general words in language must therefore be that is Concrete, and the second every thing that is Concrete, and the second every Term that is Abstract, or, in short, that can be included under the word State.

§ 30. The foregoing views demonstrate, that all reasoning is effected solely by means of words, either single, or linked together in those chains which we call Conceptions; but that no single word, state even, not excepted, can be a conception, in any other sense than as a sound preserved by the memory. It must, however, not be forgotten, that many single words are really compounds: thus the word altitude (altitudo) is such, being compounded of altitude, and tudo, state, that is, high-state; 16

⁽¹⁶⁾ This rule will equally apply to other words, derived from the *Latin*, ending in *tude*, such as *gratitude*, *magnitude*, &c., as well as to all other Abstractions: for whatever may be their termination, it must imply

so likewise the Terms cause and effect are representative signs of the Conceptions, that Cause is that general state which necessarily includes in itself the notion of an effect; and, reciprocally, that an Effect is that general state which necessarily includes in itself the notion of a cause. If any one is willing to extend this view, and think that every Abstract Term may be considered as the abridged representative of a compound notion, I will not differ with him. He may say, for instance, that goodness, or virtue, implies the state of him who is good, or virtuous; and vibration, or movement, the state of action of that which vibrates, or moves. Indeed, the consideration of the languages of America, which are in that state which they must have assumed at

imply State. The words benevolence, reverence, prudence, observation, reflection will be sufficient to serve as examples. The word transubstantiation implies the STATE-of-substance-transcending (-appearance), that is, substance the state of which is really different from what it seems to be to the senses. I beg the reader to bear in mind, that my object is not, as I have before intimated, with etymology. For instance, when I say that the tude (TUDO) of the foregoing words implies State, I merely mean that this word (State) is the best our language affords for the purpose; for I have already pointed out, in § 11, that the Sanscrit word Bhavas, meaning existence, or being, in general, is its true repre-If effects, therefore, bear evidence of their causes, it marks that the Hindu mind had a just philosophical turn, even in its infancy—a fact demonstrated by the whole structure of the Sanscrit language: and certainly it is no small glory to this ancient race, that theirs is, perhaps, the only language in which the Prineiple of Abstraction is exactly expressed by the word that ought to be employed.

their birth, as is proved by the uniformity of plan that reigns throughout them all, however they may differ from one another in the sounds they employ, would add very much to the belief, that even Concrete Terms are but the elliptical forms of longer sentences that were employed to represent the most common objects of life. All, therefore, that I mean to contend for is, that while the Concrete Words, house, dog, horse, &c., may be changed or broken up into letters, there still will be Houses, Dogs, Horses, &c. remaining in nature; but that if we decompose the Abstract Terms goodness, greatness, whiteness, &c., there will then remain nothing that they represented; for with them must likewise disappear, by the same process, the main word; that is to say, the word State, in the examples just given: and it consequently follows, that if there were no language, there could be no Conceptions. In short, Abstractions may not inaptly be compared to those crazy potentates found in mad-houses, who assume all the airs and attributes of royalty, without any subjects for their support, and who hold their rule by an ideal title. So these Abstract Terms, when sifted, have neither subject nor object which they represent; and are, indeed, what Roscellinus termed them, mere sounds. Abstract Terms, therefore, are accurately represented by the term Conceptions; which include, as has been already stated (§ 3), all

the Phrases, Inferences, Opinions, Conjectures, Notions, Propositions, Assertions, Statements, Arguments, &c., we have already heard or conceived of ourselves by the means of language.—Not the least remarkable circumstance that attends the consideration of language, is the fact, that the limited capacity of children, at a very tender age, is sufficient for its attainment, and even for its tolerably correct employment; and, that idiots are able to acquire it with sufficient facility, so as to be no way embarrassed to explain themselves-though some languages, the Basque for instance, are extremely complicated in their structure: while parrots, though highly intelligent, are unable to do more than repeat by rote the sounds they imitate; thus forming a striking distinction between Man in his lowest, and the Brute in his highest state.

§ 31. It is worthy of remark, that it is, 'as I said before, by turning language against itself that we make it give evidence on its own nature, and thereby unfold much of the mystery that veils its great parent, the human intellect. From an indistinct feeling of this truth it was, that I said, formerly, that' "we must thoroughly comprehend the nature of this first offspring of the human mind, before we can hope to arrive at any legitimate conclusion as to the laws that regulate the phenomena of mind

- itself 17." The inference to be deduced from the preceding inquiry is as follows:—
- § 32. Whatever really exists, must occupy space; and whatever does not do so, is only a state, that is, a symbol invented for the purpose of reasoning.
- (") A Short Inquiry into the Nature of Language, prefixed to the Author's Dictionary of the Bengali, Sanscrit, and English Languages.
- (18) Or, in popular language, Whatever is not Body or Spirit is only a word.

OF ABSTRACT GENERAL AND PARTICULAR TERMS.

- § 33. I now proceed to examine in detail those primary Terms which metaphysicians have been in the habit of taking as self-evident truths; and which form, consequently, the data and axioms of metaphysics: but I must first make a few remarks on the distinction between Abstract, General, and Particular Terms. So little attention has been bestowed on the classification of the words with which we reason on the most important points, that no distinction is commonly made between Terms, whether they are Abstract, General, or Particular. Yet this want of clearly-defined notions on the subject must lead to much confusion in reasoning.
- § 34. It matters not whether a word imply a Perception or a Conception; that is, whether it be Concrete or Abstract: it may in either case be rendered General or Particular. General Terms are consequently both Concrete and Abstract. Goodness, gracefulness, perfection, &c., are Abstract Terms, employed in a General sense; and they may be equally used in a Particular sense, at pleasure: thus we may speak of The goodness of the

Deity—The gracefulness of a swan—The perfection of nature, &c.; and when we do so, these words have then a General sense: but when we say, He has a goodness of heart peculiarly his own—The swan has a gracefulness that belongs to no other aquatic bird— Nature has a perfection that art can never attain, we must see that these words, which are simply States of Being, can be rendered both General and Particular. In a similar manner, the name of every Particular material thing may be rendered General, by either prefixing the definite article to it, or by employing it in the plural. We may speak indifferently of the horse, the dog, the oak, the diamond, &c.; or we may generalize, by speaking of horses, dogs, oaks, diamonds, &c. Indeed, it appears to me, that as often as we speak of any thing in an indeterminate or indefinite manner, we still do no more than generalize; and so the expressions, a horse, a dog, an oak, a diamond, &c., have scarcely any difference from those with the definite article, except that the figure is less noble and impressive. only exceptions in our language to the foregoing process of generalization is found in the words God and man. Neither of these can be rendered general by prefixing the. The first is always rendered definite and particular by so doing; as when we say, the God of Abraham, Isaac, and Jacob. We can also prefix the definite article to the name of God: as when we say, the Almighty, the Omniscient, or the Omnipotent God, &c.; which likewise, it will be admitted, have a Particular, and not a General sense, when so employed.—There remains one mode of generalization to be yet explained; which is more perfect, perhaps, than that afforded by preceding examples; as, when we substitute shipping for ships, literature for letters, cavalry for horsemen, &c.; thus leaving no doubt on the mind in what sense we are to understand such terms. The reader, however, must not confound this common and natural use of language with the artificial Abstractions and Generalization of naturalists, such as have been alluded to in § 18.

§ 35. The object of the foregoing remarks is to convince the reader that every Abstract Term may be used either in a General or a Particular sense, and that every Concrete Word may be equally employed in the same way. But he must carefully remember, that though we speak of horses, dogs, &c., they have no more reality, when employed in a General sense, than is the case with Abstract Conceptions. This caution is the more necessary; as the individual objects being real, we are apt, unconsciously, to refer the General Term to the Particular object from which it is taken, and so to mislead ourselves. The distinction here pointed out, that even a word that signifies something material becomes a mere non-entity when employed

in a General sense, is of the highest importance, as a help to the understanding in the comprehension of the nature of Abstract Terms. The reader cannot but feel that there can be no such thing as a General tree, or any other object; and that the word tree is therefore a mere sound, and nothing more, when used in such a General sense; because it then refers neither to a Particular oak, ash, fir, or other tree. Now, if this be so with what has real representatives, how much less (if the comparison be admissible) must it be the case with what are merely Abstract, and which have no representatives in nature?

§36. Having thus shown, in treating of Abstract and General Terms, that all the words implying States of Being may be either considered under a General or a Particular point of view, it remains to say, that when they are employed in the first of these divisions, they are then used, absolutely, without any reference to a contrast or comparison; but when we speak of a Particular State, it may be contemplated with reference to the same kind of State existing in a higher, lower, or equal degree in some other subject. Thus we can suppose that the ambition of Alexander was greater than that of Parmenio, by the celebrated reply he made to the latter, when Darius proposed a division of the contested empire of Persia. But when the Poet says,

"Ambition first sprung from your blest abodes,— The glorious fault of angels and of gods;"

it is evident that he has employed the word Ambition in an absolute and general way, free from all degrees of comparison; as is clear from the omission of the article, definite or indefinite. The same may be said for the word "Fame," in the following passage; which differs from the sentiment contained in that just quoted:—

"Fame is the spur that the clear spirit doth raise, (That last infirmity of noble mind,)
To scorn delight, and live laborious days."

Here the religious persuasions of Milton have led him to undervalue one of the most ennobling motives to action that can exist in the human breast. What is either Ambition or the desire of Fame, but the love of notice, exciting us to deserve the admiration and approbation of our fellow-beings? And is such a universal passion, evidently implanted in our bosoms by the hand of God himself, to be called an infirmity? This can only be said of its abuse: and the same can be said, if we allow any other feeling to obtain an undue ascendancy.

§ 37. The next step is, to give the reader an opportunity of judging of those Abstract Terms that constitute the fundamental notions of metaphysical reasoning: and he should give his whole

attention to this most important subject; as he will, I am certain, be quite convinced, if he still should require any further proofs, of the deceptive influence exerted by language, in leading the understanding astray: but he must never forget the result of what he has just read; namely, that—

§ 38. Every Abstract Term may be either General or Particular; and every General Term may be either Abstract or Concrete: but that a word which is Abstract or General is nothing but a sound, dependent for its existence merely upon language.

Of Entity and Quiddity.

§ 39. There is a fortune among words, similar to what we see amongst men: some are destined to be long retained in favour; whilst others are discarded, never to be recalled again. This is strikingly exemplified in the words Entity and Quiddity. The first of these continues to be considered of unexceptionable value; but the last, having been discountenanced by Locke, has sunk into insignificance, and even contempt. Entity, implying being-state, or being-ness, stands for any thing that is real; and is certainly a harmless word, as long as it is not made to pass for something real by its own nature. Quiddity, derived from the QUIDDITAS of the Schoolmen, is deduced from quip, what? and therefore implies what-state, or what-ness: though they used it for Essence; it being held, by the Realists among them, that every abstract relation had a real Essence, through which it had its being: but Locke's reasonings having shown the absurdity of the notion, which indeed had been long questioned, the word sank into complete disuse, except occasionally to whet the wit of modern metaphysicians. Locke, however, seems to have been in a great measure a Realist himself; and his whole work on Human Understanding is built upon the belief in Abstractions. These two words are humourously alluded to by Butler:-

"He could define all acts,
And knew their natures and abstracts;
Where entity and quiddity,
The ghosts of defunct bodies, fly."

§ 40. The Arabs would appear to have represented this word by MAHIYAT; which is of very singular formation, being contrary to the general structure of their language: it implies what-is-it-ness. In the Sanscrit language, the word tattwam, meaning that-state, or that-ness, seems its exact representative. These analogies are curious, as showing the limited resources of the human mind, and the similarity of its mode of proceeding under any difficulties it has to surmount. Quiddity and Entity, though they have now parted company, seem to have represented the Essence and Form which we occasionally hear contrasted with one another.

Of Habit, Habitude, Custom, and Use.

§ 41. These words are very commonly employed indifferently, the one for the other: if however we discriminate, we shall at once see that they are distinct in the notion the mind entertains of them, and ought consequently not to be confounded together. When any act has been repeated a few times, we perform it again, unconsciously, from *Habit*. Habit therefore always produces an *act* of some kind or other. If we repeat such acts frequently, we

become, from Habit, habituated or accustomed to them; and Habitude and Custom consequently are the result of Habit. When, however, we are exposed to some inconvenience for a continuance, we become less and less sensitive to its annoyance; and we are at last so used to it, that we become almost indifferent to its existence, and even unconscious of it; and we are then said to be reconciled to it from Use.

Of Knowledge and Wisdom.

§ 42. The words Knowledge and Wisdom are very often employed indiscriminately for one another. They ought, however, to be carefully distinguished. Knowledge simply implies every thing we have learnt, either by instruction, observation, or experience. Hence a man may be very knowing and very learned, and still never be able to pass for a wise To make a wise man, it is necessary that he should have reflected upon what he has learnt; for it is only through having considered any fact, in its various points of view, and in its relation to others to which it has an affinity, that a man can be said to know it to any useful end. It is solely by the same process that he arrives at those general conceptions that store his mind for every emergency: and he who can only trust to what he remembers of other men's thoughts, to supply him with the means of meeting any exigency, will rarely find himself prepared to effect a happy result. There is no man that is not wise in some things; for every one has more or less reflected on what most nearly concerns himself: but there are infinite degrees of Wisdom. Generally speaking, however, it is only to the highest efforts of reflection that we give the name of Wisdom. Indeed, it seems, from the force of Realism, to be taken in an absolute sense, free from all comparison. Where it exists in a high degree, it is felt to be something almost divine; as in the instance when, by the help of personification, we speak of The voice of Wisdom; or as something Real, when we recall to mind the celebrated sentiment of antiquity, Wisdom is the sole imperishable possession 19. In the wellknown and melancholy sentence, where it is said, " For in much wisdom is much grief, and he that increaseth knowledge increaseth sorrow 20," we must

⁽¹⁹⁾ Σοφία μόνη των κτημάτων ἀθανάτων.

⁽²⁰⁾ Eccles. ch. i. ver. 18.—In the Hebrew original, the first word is the correct translation of hukmah; but the second would be more correctly rendered science, which is the true meaning of daüth. This passage is remarkable, as being in direct opposition to the opinion of Ciecro, "Una igitur essemus beati cognitione rerum et scientia" (Frag. Hortens. de Trinitate); as well as to the sentiment of Virgil, "Felix qui potuit rerum cognoscere causas."

As to the sentiment itself, it may probably have arisen from the difficulties attendant upon study and composition in those days: of which some notion may be formed, if it be true, as is said, that Zoroaster committed his doctrines—not to paper—but to cow-hides, on which he inscribed them with a knife. But in these days, when the art of printing has made study so easy, it is a different matter; and it can be almost said, that he who runs may read.

not suppose that Wisdom and Knowledge are placed purposely in contrast, but that they are merely put in a sort of opposition for the sake of the diction,—a figure that is common in the Hebrew language, and to which the appellation of parallelism is applied. Knowledge must, by its very nature, consist in an acquaintance with particulars; -- Wisdom, with generalities. The first, therefore, is to be obtained, as I have before said, by instruction, observation, or experience; but the last, only by reflection. The Ancients were wise with, comparatively, little knowledge; and the Moderns are extremely knowing, with very little wisdom. Those who devote themselves to study and observation, have but little time and opportunity for reflection; and the converse may be said, with equal truth, of those who are given to reflection. The state of mind required for each is different; and, perhaps, the kind of mind, likewise.—After what I have said on the nature of abstract words, it is hardly necessary to repeat, that there is neither Wisdom nor Knowledge; and that we can only say, that such a man is wise; or, that he knows something more or less perfectly than some one else.

Of Principle.

§ 43. Principle is a word in the mouth of every one; and yet it is not, perhaps, always understood

as exactly as its importance merits. In morals, it means those first notions which are the regulating points of all good conduct. Thus, not to steal, to lie, &c., are all Principles, which it is the duty of every good man to obey. When, therefore, any one's conduct is thus regulated, we speak of him as being "a man of principle"; and when he sets the primary notions of morals at defiance, we equally say, "he is unprincipled." Principle, therefore, implies a mind that has arrived at certain primary conceptions, either by the means of instruction, or by a spontaneous effort of reason, or by both. We must feel, consequently, that it is the pure offspring of reason; and that its birth and value are only appreciated in proportion as its parent obtains dominion in the affairs of mankind; and as its own offspring, good conduct, is duly respected. Even in subjects that do not relate to morals, we find the word Principle commonly employed; because whatever is the object of reason, must contain, in itself, some Principle, or leading notion. Thus every law and every argument must be referrible to a Principle, which is their guiding reason; or they will be nothing but nonsense. Principle, therefore, though a mere word, is one of singular importance, as it is the polar star of the moral and intellectual man. Indeed, among the various Abstractions that have been deified, it is singular that Principle has been overlooked. Perhaps the reason is, that it is only found in languages that have arrived at a high perfection; and that its value is, consequently, only felt in those advanced stages of civilization in which men are too wise to be so grossly duped by a mere word. Yet it is to it that the Legislator must look, as the buoy to which all actions must be moored; and without which, mankind will ever be at the mercy of the storms and hurricanes of their passions.

§ 44. Principle is alone the true bond of society, that binds every man firmly to his neighbour, and enables him to reckon upon his word with the same certainty as upon another self. When, therefore, communities possess this link in perfection, which is stronger than any that could be formed of adamant, they will arrive at a degree of internal strength and prosperity at present unknown: but, unfortunately, in the hollowness and unsoundness that inevitably lurk in the rapid growth of civilization, cupidity and lust but too often assume its appearance, and then spread more ruin and misery than could flow from open hostility to this uncompromising safeguard of society. The importance, therefore, of Principle cannot be too early inculcated on the minds of children; and even one conquest of self, in the infantine period of life, will be of inestimable advantage to the future man, by giving the child a confidence in his own strength of mind, that will grow with his growth, and which nothing can afterwards shake or weaken. Unhappily, however, the truth is quite overlooked by the generality of mothers, in their blind admiration of their offspring; expecting, in their utter ignorance of human nature, that good conduct must be the natural attendant upon what they are pleased to think so perfect; and forgetting the profound injunction of Solomon, when he says, "Train up a child in the way he should go; and when he is old, he will not depart from it." If the mother, therefore, neglect to instil good Principles, the schoolmaster's efforts will be next to useless: because bad habits are with difficulty eradicated, and the future man will be but the enlargement of the child in mind and body. And be it remembered, that a very slight incision made in the tender sapling becomes a yawning and unsightly deformity in the full-grown tree, and must continue as long as it exists. The stubborn oak, too, may, by early training, be made to retain any form into which it is bent. Moreover, all education should be directed to meet the peculiar propensities of the individual; the knowledge of which requires some degree of discernment. The self-willed and selfish libertine may be seen in the pampered pet of home; and the remorseless villain is generally shadowed out in the cruel and apathetic brat. Nearly every instance of moral excellence may be traced to the mother's fostering care; for she, and not the father, is necessarily the child's companion, guide, and example.

§ 45. The word Principle is often employed, though perhaps without any necessity, for an element in physics. Thus we speak, at one moment, of Chemical Principles, and, perhaps, at the next, of the Principles of Chemistry, using the word Principle in two opposite senses: yet it appears to me to be a pity to employ this, or any other term, for more than one purpose; as it cannot but lead to confusion of thought, and, consequently, to the production of error. Like all other words that do not admit of an obvious analysis, it fails to impress its own meaning on the mind of the hearer. Were we without it in our language, we might supply its place equally well by such words as leading notion, prime notion, &c. In morals, a Principle and a Rule appear to be alike; but in reasoning, the Principle is as the soul, and the Rule as the body which it guides and enlightens. When, therefore, we are doubtful of the intention of any Rule or Argument, a reference to the Principle upon which it has been constructed becomes the sole means by which we ascertain how either is to be understood.

Of Fortune, Chance, and Providence.

§ 46. In all periods of the world, and among all nations, certain general words have been in current use, to account for the events and vicissitudes of life. In antiquity, Fortune played a great part; and is still appealed to, though it has ceased to be worshipped as a deity. Chance, in the present times, has the same office; though when employed by one who believes in an Intelligent Ruler of nature, it amounts to a contradiction of his own convictions. Of such words, the most unexceptionable is Providence; for though an abstract term, as it appeals to the foresight of the Deity, it is only expressive by the reference it contains; which is indeed so strong. that the word is generally understood as representing the Deity himself. Nor does it, as in the former terms, necessarily preclude the just inference of reason, that every event must have had an immediate cause. The observations I have made on Fortune and Chance might be extended to Fate and Destiny; but I feel it is unnecessary to say any thing further on this subject.

Of Matter, Substance, and Body.

§ 47. These three words are often employed for one another, without much attention to the peculiar force of each, particularly when they are opposed to spirit; but contrasted with one another, they have distinct senses. Matter is that general term which we employ when we speak of the substratum of things, without any allusion to their peculiar natures: it is generally opposed to mind. Substance implies Matter existing in some peculiar state or condition: thus, wood, stone, &c., are Substances: it may be opposed to essence. Body, however, refers distinctly to form, and is made up of Substance. Thus, a tree, a pebble, &c., are Bodies. Its opposite is spirit; though, should soul be used, it then relates exclusively to human kind. It therefore follows, that—

§ 48. Matter is the substratum of Substances, and Substance of Bodies.

Of Nature.

§ 49. Perhaps no word is used so frequently, and so indiscriminately, as *Nature*; nor is there one that leaves so many vague notions on the mind. Were we only to attend to such meanings of words as result from investigating their etymology, nothing would be easier than such a process; but words acquire distinct senses, from their primitives, by convention. The term 'Nature' we have received from the Latin, through the French. In its original language, it belongs to a class of words which

imply the act of what the root signifies, as well as the result of its action, and which terminate in TURA and URA; such as, STRUCTURA, PRESSURA, CÆSURA, NATURA, therefore, as derived from NASCOR, I am born, would seem to mean that which is born, or produced. In Greek, Nature is represented by the word Φύσις, which is formed from the verb φύω, I bring forth; or Φύομαι, I am born, and the termination $\sigma_{i\xi}$, that always expresses the State of whatever the root implies; and in this case, therefore, means, state of bringing forth, or of being born; but popularly, Nature, Birth, Growth, &c. In the Sanscrit language, Nature is represented by the word PRAKRITIS, derived from PRA, the same as the Greek and Latin PRO, and KRI, to make, which seems to be the very original of the Latin creo, I make; while TIS is the same as the Greek $\sigma_{i\varsigma}$ just spoken of. Now, as this termination always implies the result of the action or state of whatever the root may signify, we must see that PRAKRITIS conveys the notion of fore-make, or that which was first formed,—that is to say, Nature. In these words we must feel that nearly the very same sense is implied by all, namely, formation, production, &c., however different the roots or languages may be from one another, in which they exist. Such words as NATURA, φύσις, and PRAKRITIS, were all brought into use long before man began to reason on the mysteries of life; and, consequently, required to be turned from their original meanings,

for the new purposes to which they were applied. This was as inevitable as unfortunate. Mankind will do any thing with their old materials, particularly in the hurry of conversation or the heat of argument, rather than make something new that would suit the occasion exactly; and, once employed, a word is sure to be used again, when the same necessity recurs; and it is finally fixed in its new character by habit and convention. always an unfortunate result in language; for the multiplicity of meanings of any word is certain of introducing obscurity and vagueness in its employment: and of this fact, the variety of senses, and the consequent confusion of thought, that results from the use of the word Nature, is itself a sufficient proof.

§ 50. If we examine the various senses of the Abstract word, Nature, we shall find that they amount to about four, in its original and common use; but to these we must add one more, when it is employed, as it frequently is, in a comprehensive sense. The first and obvious signification of Nature is that which implies appearance; as when we say, How lovely is Nature! on looking at any pleasing object, such as a landscape, a flower, &c. The second sense is that of contrivance, or disposition of parts; as when we are impressed with the conviction of contrivance in the adaptation of animals and their organs to the pur-

poses of their being. Thus we say, It is the Nature of a fox to be cunning; of a cat, to scratch when angry; and of a dog, to be affectionate. So we say, Wings are fitted by their Nature for flying, and Legs for walking. The third sense in which Nature is employed, is that of materiality; as when we ask the question, Of what Nature is it? meaning, Of what substance is it formed? that is, Is it of wood, stone, shell, &c.?

§ 51. The employment of Nature as an Agent, which is its fourth sense, could only be tolerated in those languages that admit of personification by the genius of their construction. By this figure, Nature is represented as an Agent busy in the production and support of this universal frame of being. In this sense it is considered by some as an imaginary being. But still a question fairly arises, as to what extent mankind are justified in attributing Agency in the phenomena beheld around them. That there is agency in action, no one can doubt; and though they have borrowed a word that, by its origin, does not imply agency, but its results, their doing so cannot overturn the inference derived from their observation. Thus, though the words for soul, in Sanscrit, Greek, Hebrew, and Arabic, originally signified air or breath, their having been thus turned aside from their original sense does not destroy the existence of the thing they may represent more or

less aptly. A ship has not the less a real existence because it is called a man-of-war; and so of any other thing. It could not be expected, in the infancy of society, that a name for so subtile an Agent should have been specifically invented for the occasion; and in those languages which admit of personification, its want was not felt, as the multitude use personified words in a real sense, and never doubt of their actual existence: hence, Nature stood, and continues to stand, in their minds, for a kind of beneficent Being, that is not merely the operative Agent in the universe, but lends her assistance as often as the corporeal necessities of animated beings require her aid. Thus we say continually, Nature came to his assistance; Nature made a great cure: and we say with equal indifference, either Nature or Instinct teaches the bird to make its nest, &c.; Nature sometimes fails in her works; and similar expressions 21.

§ 52. A fifth meaning may be assigned to Nature; as when we sum up all we can conceive under the expression *God and Nature*. In this last case, the word has the collective sense of all the others, and

⁽²¹⁾ These observations being written while absent from books of reference, I have not been able to consult the large edition of Dr. Johnson's Dictionary, where I remember he sums up, from Boyle's Essay, the various senses of the word *Nature*. They may, however, be acceptable to the reader, as the result of independent thought. They will, however, be given in the Appendix, Note (C), with some remarks of my own.

implies Appearance, Contrivance, Agency, and Materiality. These are, I believe, all the principal senses of the word, though undoubtedly others exist; but the only one which really concerns the reader is that of Agent.

- § 53. It may be interesting, to compare these views with those which Cicero puts into the mouth of Balbus, the Stoïc, in his work *On the Nature of the Gods*²².
- "Some think that Nature is a certain irrational power, exciting in bodies the necessary motions: others, that it is an intelligent power, acting by order and method, designing some end in every cause, and always aiming at that end, whose works express such skill, as no art, no hand, can imitate: for they say, such is the virtue of its seed, that, however small it is, it falls into a place proper for its reception, and meets with matter conducive to its nourishment and increase; it forms and produces every thing in its respective kind, either vegetables, which receive their nourishment from their roots, or animals, endowed with motion, sense, appetite, and abilities to beget their likeness. Some apply the word Nature to every thing; as Epicurus, who acknowledges no cause, but atoms, a void, and their accidents. But when we (the Stoics) say that nature forms and governs the world, we do not apply

⁽²²⁾ Translated by Thomas Francklin, D.D., Book H. p. 111.

it to a clod of earth, or a piece of stone, whose parts have not the necessary cohesion²³; but to a tree, an animal, in which there is not the appearance of chance, but of order, and a resemblance of art."

§ 54. The first signification of Nature in this passage is just the equivalent of what is commonly called Power; as will appear in the following views. In its next sense, in which it is personified, it approaches very near to that which we call Providence; and, in the last, it is employed very much in the general and arbitrary way we hear it used in familiar conversation.

Of Necessity.

§ 55. Few words have had a greater influence over the minds of men than that of *Necessity*; so much so, that it might be almost considered to be superior to the Deity himself. By the help of Realism, it has been converted into a reality of the first importance. Indeed, it is not always clear whether the Deity is not oftener controlled by Necessity, than obeyed. Put into plain English, this mighty word means nothing more than *unyielding*—or *unceasing*—state, that is, *Unyieldingness*, or *Unceasing*—

⁽²³⁾ There is evidently some error in the original; which commentators have endeavoured, in vain, to clear up. The context requires a word implying *design* or *reason*; *structure*, for instance; as a clod, or a piece of stone, exhibit cohesion as much as vegetables or animals.

ness; being derived, through the French, from the Latin NECESSITAS, a word which in ancient mythology was personified as the mother of the Fates.

Of Infinity.

§ 56. It has been shown in § 5—12, that Abstractions must be referrible to some Concrete Term that has at least suggested the notion that led to their formation. When, however, we ask ourselves what is the Concrete Thing that has suggested the notion of Infinity, that is, of endless-state, or endlessness, we can only reply, if we dare venture so far, that it is derived from what is infinite. Should it be again demanded of the person who might make such an answer, what the thing is which is infinite, he would be brought into great difficulty; for he could not point out, or produce, any thing which is infinite. He might possibly say, that the universe is infinite; but as he had never seen the whole of the universe, he would fairly beg the question, and fall into an absurdity at the same time: for if it could be called a whole, it would be definite, and not indefinite, which every thing infinite must be, by the same reason that the moment a thing can be said to be definite, it is finite, either in number or quantity. The notion of Infinity, therefore, is a mere effect of those conceptions that depend upon our putting sounds together, and is, consequently, a non-entity;

for even in imagining a space to be succeeded by a space, and that by another, and so on, we can never arrive at the notion of Infinity; and wherever we leave off, though we have added one system of stars to another, mentally, we have, at the best, only reached, even in imagination, to what is finite. But we can take the question up under another point of view, that will leave us no room to doubt the foregoing conclusions. Every thing of which the human intellect is cognisant, can be considered as representable by a definite number. Thus we must suppose the number of the planets and satellites of our system to be of a certain definite amount, be they thirty, forty, or whatsoever number any one might fix upon. But if we were to assert, that though they did not exceed fifty, yet that they were indefinite. because their number was unknown to us, we should certainly be deemed insane; for every one will allow, that they must be equal to a certain number, if they exist at all. Now, what are we to think of the number of all the other heavenly bodies—is it definite, or indefinite? He who shall answer that they are definite in number, will then have tacitly admitted that they are not infinite; and he who shall be of opinion that they are indefinite, will have acknowledged that they have no existence. Here, then, is a dilemma, from which we cannot escape; and we shall arrive at a similar contradiction between reason and sense, as often as we push

any question in nature to an extreme. In every point of view, therefore, Infinity is a mere sound. We here see a case that points out most clearly to us that the intellect is the helpless captive of a chain of words it has forged for its own use, and which never can be permanently burst asunder; since, at the very moment that reason and reflection break a few of the links, they re-unite of themselves, by the mere effect of habit. With these very chains, however, man presumes to think he can measure and survey all things; and, in the war of words, dares to strike down every adversary, who, from want of equal dexterity or opportunity, has not been able to forge shackles for himself of equal weight and size. So proud, too, is he of these bonds, made by his own ingenuity, that he looks down with sovereign contempt upon those who are not equally encumbered; and, as the reward of the fallacies with which he has, in his own conceit, fortified his understanding, he becomes the theme of admiration and idolatry with those who are, in fact, less benighted than himself; and who are really his superiors, inasmuch as they are conscious of the darkness in which all things are involved; -for to have no opinion, is better than to have one that is false. Hobbes has remarked, "As men abound in copiousness of language, so they become more wise or more mad than ordinary 24." From these observations it follows, that-

⁽²⁴⁾ Leviathan, Part I. chap. 4. p. 15.

§ 57. Infinity is an abstraction, abstracted from nothing; and therefore a pure assumption, suggested to us by sense, and unsupported by reason.

Of Individuality.

§ 58. No question, not even Infinity itself, has so much puzzled mankind as that of Individuality. The greater effort we make to gain a clear conception of its nature, the more we feel bewildered; nor can any exertion of the mind enable us to grasp the phantom that we propose for our comprehension. It is in vain that we attempt to renew our efforts, and to exert all the attention of which we are masters;—it absolutely escapes from us, as we seem to approach it; and, yet, maliciously, to dance before us, like some visionary spectre, which the day-dream of the maniac has conjured up for the purpose of tormenting its victim. Nor is it very difficult to assign the cause, where we are seeking for a substance, when there exists only a shadow; in short, for something, where there is nothing but a sound. As an Abstraction, Individuality can have no existence; and when we resolve it into its elements, it simply implies individual-state; which State, as I have shown (§§ 5-12), being nothing more than a figment of the intellect, we have, of course, been in pursuit of what is as unreal, as the Will o' the Wisp, which misleads the benighted wanderer. To keep

our understandings, therefore, in a sane state, let us always remember, that though we can *think* of individuals, we can only *talk* of individuality.

Of Relation (Abstract).

§ 59. My great object in the present work being not merely to make the mass of mankind think for themselves, but to think justly, the reader must bear with me if I occasionally split a subject "to very rags," in attempting to lay it open to the view of all. There are many words that we are in the habit of using, and which we employ with the nicest accuracy in reasoning, by that delicate intellectual tact with which we are endowed through our organization, yet of which, if we were called upon at a moment's notice, we could not give the slightest account. The words Quality and Relation are two of these: and indeed I may say, I never met with any one, but who, even after exhibiting great talent in using them, while discussing some metaphysical point, seemed quite as if he was deprived of his understanding upon being suddenly asked what he conceived to be the nature of Quality or Relation. For the obscurity of the first word there seems to be some excuse: but this cannot be said to be the case with regard to Relation; for it clearly expresses the state of the things that we conceive to be related, that is, their related-STATE, or relatedness. For instance, I see a horse

and a man utterly unconnected with one another. I can at once, by an effort of my mind, cause them to be related, or, abstractly speaking, bring them into relation with one another. I can think of them both as animals: there is an immediate relation between them in my mind, by attributing Animality to both, without any alteration in their previous con-Or, I can fancy the Man to have bought the Horse: there is then the relation of Possessor and Possessed in my mind. Now the reader will, from these familiar instances, clearly see, that the word Relation is only a mental conception; and that even if the Man and the Horse, just supposed, were really placed in the imagined states, though the Relations would then be actual, they would only be the result of a mental operation which depended on language for its existence. For let us suppose the Man and the Horse to be viewed in reality in the imagined cases by a man born deaf and dumb, and who had never been taught to read or write; as he could never classify them in his mind as Animals, he could have no means of attributing a common nature to them, because he would only see the Man and the Horse, and he could likewise never think of the relation of Possession; for a Relation not being like an image, he could not, from want of language, conceive any thing of the kind: and further, in the last case, though he might be sufficiently aware, by long experience of the value of money, that the Man had bought the Horse, the notion of Ownership would be unknown to him, for the reason already assigned; namely, that from his ignorance of language he had not the slightest conception of such an Abstract Relation; and the utmost he could possibly conceive, would be, that the Man was the owner of the Horse. The reader will see, from these familiar illustrations, that Relations are but Abstract States, formed by the means of language: and he must remember, from what has been already said (§§ 5—12), that Abstractions, that is, Abstract Relations, are mere figments, invented by the intellect for the purpose of reasoning, just as algebraic signs are mere symbols by which Relations of number or quantity are compared. All he has to do with this, or any other Abstract Term, that may perplex him for the moment, is to reduce it to its original, which he will always find to be either a verb or an adjective. Relation itself, therefore, is to be referred to the verb to be related; and the reader will remember, that every Relation necessarily supposes a mind capable of conceiving two or more things or acts, as being related to one another, either temporarily or permanently.

Of Relation (Personal).

§ 60. Language not merely enables us to form Abstract Relations, but to bring the whole social

world into a union that could never have existed without it; for by it man has been enabled to invent terms that bind the whole fabric of society together. Thus we have Sovereign and Subject, Master and Servant, Husband and Wife, Father and Child, Landlord and Tenant, and a multitude of other terms that have been invented to express the Relation we stand in reciprocally to one another. By the existence of these, we are reminded of our duties, even without the aid of morals. Though these words are general terms applicable to persons, they are as purely conceptional as those that are abstract; for it would be as utterly impossible to prove their existence or reality, as it would be that of whiteness, goodness, greatness, &c., though they are of quite a different class of words. They are not the names of persons, but their supposed States or conditions. Were we to see an individual who was unknown to us, we might be informed that he was a Sovereign, a Master, a Husband, a Father, and a Landlord 25; but we could not be certain of the fact, though he might combine all these Relations in the mind of the persons from whom we had received our information: but if we were told that he was a man, we should smile, because our senses, in all probability, would

⁽²⁵⁾ In addition to the foregoing Relations, he might be a *brother*, an *uncle*, a *grandfather*, a *nephew*, &c.; yet no one would be foolish enough to suppose that he had so many individual natures, as he stood in relations to others in the minds of those who spoke about him.

previously have rendered the information unnecessary. This points out to us, that words implying Relations are of a class differing from that which includes the names of Things. Were we desirous of applying the *sense* of the foregoing words to persons, in terms that do not express Personal Relationship, we must make use of those that stand for *Agents*. Thus for Sovereign, we can employ *Ruler*; for Father, *Begetter*; and for Landlord, *Land-Letter*; and so on for others.

Of Correlation (Abstract and Personal).

§ 61. Though many words express Relation, there are only a few, strictly speaking, that possess Correlations; but the others have each an opposite, with which they stand in contrast. Thus Goodness implies Badness, Elevation, Depression, &c. The word Cause equally suggests its Correlation, Effect; and the mention of this last, likewise, immediately calls up the notion of Cause. Hence we see that they are necessarily connected. The same is the case with all personal Relations. They have every one a specific Correlation. Husband has Wife; Father, Child; &c. Some, indeed, must, from their being connected with sex, have double Correlations; as Father has both Son and Daughter: Uncle, both Nephew and Niece; &c. The mention of any Relation must call up one of its corresponding Correlations:

the same is equally true of the Correlations, which must do the same. Should we, however, consider Effect, Son, Wife, &c. as Relations, then Cause, Father, Husband, &c. are their reciprocal Correlations; but it is more usual to call (if I may employ the expression) the major the Relation, and the minor the Correlation. I think, as I have included Abstract and Personal Correlations under one head, it will be as well to enumerate here such Relations, Abstract and Personal, with their Correlations, as seem of most importance.

ABSTRACT.

Relations.	Correlations.
Cause.	Effect.
Reason.	Consequence.
Motive	Act or Result.
Origin.	End.
Agency.	Act.
Source.	Product.

§ 62. These are all the Abstract Relations that at this moment present themselves to my mind; but the following are some that are Personal.

PERSONAL.

Relations.	Correlations.
	Offspring.
Parent. Sovereign.	Subject.
Master.	Servant.
Landlord.	Tenant.
Landiordi	

§ 63. These Personal Relations and Correlations might be carried to a great extent; but the instances here given will be sufficient, as examples: yet the Terms, though accurate, are not sufficiently precise, because they might be applied to such words as Goodness and Badness, which are the mere contraries of one another. The two classes, therefore, would be much more exactly defined by the terms major and minor Relations; for the reason that Cause is always superior to Effect, Source to Product, &c. So. Offspring, Wife, Servant, Tenant, &c. are subordinate, but not opposite to their Correlations, Parent, Husband, Master, Landlord, &c. Metaphysicians having had a vague feeling that Abstract Relations produced their Correlations, and forgetting or ignorant that they were but Abstractions, they were led to mix up the question of physical power with that of cause and effect, and, consequently, arrived at conclusions altogether absurd and irreconcileable with common sense. See § 94.

Of Quality.

§ 64. I have now to give an account of the most important word employed in metaphysics. *Quality* is the very rock of metaphysical systems: when examined, however, it will be found to vanish into "thin air," and to leave us nothing as a *residuum*. We have derived this word from the Latin, through the

French; and it was brought into use in the former language by Cicero, in explaining the metaphysical notions of the Greeks. The Greek word for it being ποιότης, he naturally made an equivalent; which gave him QUALITAS, derived from QUALIS, implying, like ποῖος, what? or, what manner? Thus far every thing is very good; for even the two words, from which the Greek and Latin were formed, have a closer relationship than is commonly supposed. But when we come to inquire what the exact sense of these two Abstract Terms is, we find we can represent them in English by the words what-manner-state, or what-manner-ness 26, both of which, though a little bald and strange, only require time and use to make them pass current for the same end as the orthodox word Quality. The Arabs, in translating Greek works, were in the same difficulty that Cicero had been; and strained the genius of their language a little to form the word KAIFIYAT 27, from the adverb KAIFA, how? Hence their compound implies how-ness, instead of what-manner-ness; but the difference is so very slight, as to be of no practical consequence. The word so formed is still in current

⁽²⁶⁾ The reader must feel that the argument deals with the *nature* of these Abstract Terms, and *not* with this or that shade of meaning. Perhaps $\pi o i o \epsilon$ and qualis, if referred to their probable Sanscrit originals, might be rendered *what-like*, instead of *what-manner*: in this case the sense will be *what-like-ness*.

⁽²⁷⁾ Meninski, in his Lexicon, explains the word Kaifivat by "Qualitas, modus, (quasi, quomodeitas)."

use in the Turkish, Persian, and Hindustáni languages; and very probably in those of some other Mahomedan nations. Now, most likely, the reader has not only never doubted of the reality of Qualities, but possibly never took the trouble of inquiring into the exact meaning of the word. In all probability, he will be a little surprised at the inflaence mere sounds have exercised over his understanding. when he feels their exact import; and he will, perhaps, be likewise convinced of the delusiveness of the division, made by metaphysicians, of Qualities into primary and secondary. We can have no notion of Qualities, except through the words that represent them. Though we may talk of redness or whiteness as separate and real existencies, yet, if we would understand what they mean, we must think of some objects that are Red or White; for when we recall them to mind, we remember the images, that is, the particular pictures, or figured representations, they raised, which were either Red or White: but it is evident we have no Conception of Red or White that is not coupled with some material thing, or arising from its action on our optic nerve. Still, objects are neither Red nor White; it is only something reflected from them (photogen 28), which

⁽²⁸⁾ The word *light* implying merely a sensation, some new term is necessary, to distinguish the cause from the effect, just in the same way as with respect to *caloric* and *heat*. See § 4.

stimulates the retina, and makes it *feel* in the way we call Red, White, &c.

§ 65. When we speak therefore of Qualities, we must always bear in mind, that we do so by a mere form of speech indispensable to reasoning; but, that they have no more foundation in truth, than the phrases sunrise and sunset; which we still use, and must continue to do, though we are now convinced that the sun neither rises nor sets, and that such appearances are made by the rotation of the earth on its axis. In the same way, though Sensible Qualities are mere words, we must never forget, when we employ them, that we merely mean to say, that, through the stimulation of the brain and nerves, the percipient feels hot, cold, &c., and his retina, Red, White, &c.: for Sensible Qualities must necessarily be in the subject or percipient; yet they, as well as those that are Intellectual, are commonly held to be in the object, or thing contemplated. It would be just as rational to say that the pain or pleasure we feel from cold or heat exists only in the object producing it, as to assert that the cold or heat we feel, on placing our hand on something cold or hot, exists only in the thing that has absorbed caloric from us, or communicated it to us; for heat and cold are mere sensations, and so it will be allowed are pleasure and pain. When, therefore, I put my hand on a jug filled with boiling water, and reason

on the subject, I am conscious that the jug is not Hot, but that my hand *feels hot* by the transfer of caloric from the jug to it; and it is the same with all other Sensible Qualities, which exist, therefore, only in the organs of sense of the individual who perceives them.

§ 66. Whenever our sight makes known any colour to us, it must be bounded, that is, have what is called a Form, if the object is small enough to be seen at once; but if not, it extends to the whole range of vision; which is necessarily round, because it is so limited by the orifice of the eye, through which the rays of colour are admitted. We never, therefore, can see any colour without the certainty that it belongs to some object, that is, that there is some real thing before us which we see with our eyes: for even when we look at the expanse of heaven, its azure hue (the blue sensation made on our retina) only arises from the absorption in the atmosphere of all the other rays, except the one which is reflected to the eye. Here, therefore, the real thing before us is the air; which we have as much right to say we see, in this instance, as when we think we see a house or any other object that stands before us, and at which we look; for in every case we see nothing at all, but only feel the particular kind of stimulation caused by one or more rays of light transmitted to us. All, therefore, we

can really and truly say, is, that our retina feels white, red, &c.; and that these colours have certain shapes, upon which we found the belief that certain objects are then before us, which we likewise learn from sound, touch, taste, or smell. But the whole of these sensations can do no more than confirm one another; and then we have, altogether, five witnesses. instead of one: still, we can offer no proof that the whole five may not be all deceptive. The reader, however, must now see that these five kinds of evidence being only our own feelings, we have no other proof for the reality of nature than the fact that we can feel in five different ways. Yet this simple truth is, from the trickery of language, represented, or rather misrepresented, by certain Abstract Terms we call Sensible Qualities or whatmanner-nesses!

§ 67. With regard to Intellectual Qualities, they exist only in the intellect of the person who draws the inference; and they are necessarily in Relation to his own opinions, whether borrowed or selfacquired; and they will consequently vary with his knowledge and his fortunes, as well as with the exigency of his situation at any particular moment. Thus a peasant lad would think every thing, in the house of the farmer for whom he worked, great, fine, excellent, &c.; but should he have an opportunity of seeing the superior riches and conveniences

found in the mansion of his master's landlord, his notions would be very much modified. He, in all probability, would think every thing he had previously seen, paltry and contemptible, in comparison with what his new experience had made known to him; and even his last notions would be quite eclipsed, were chance to introduce him to the sight of the splendour and magnificence of a palace. But to the eye of a philosopher, the utmost magnificence might raise nothing but a smile of pity for the glittering gewgaws, with which the highest earthly rank attempts to dazzle the minds of the common herd of mankind. In the same way, what one individual, or one state of society, may think worthy of the highest approbation, may be looked upon, by another, as utterly base, and injurious to the best interests of our race. Thus suicide was once regarded as heroic, and worthy of a great man, when deserted by fortune; yet

" To act a lover's or a Roman's part"

would scarcely meet with any applause in these days. There are, however, certain Intellectual Qualities, which, as unvarying truths, must always be good or bad; because the universal reason of mankind must *ever* approve or disapprove of them, in reference to the immutable fitness of things, and the inexorable claims arising out of human society. The eternal distinction between Right and Wrong

can never vary; Truth, too, must be always one and unchangeable; and Justice must ever be what it is now, and what it has been; nor can Honour ever shrink an atom from the scrupulous and voluntary fulfilment of its engagements, whether tacitly or openly made; that is to say, through the duties incumbent on us by our peculiar position in society, or by our formal pledges to mankind. These observations lead to the inference, that,

§ 68. Qualities are either Sensible, or Intellectual.

Of Property.

§ 69. The analogy between the terms 'Quality' and 'Property' is so strong, that a few words will be quite sufficient to explain the meaning of the latter. The word 'Property' has also been borrowed from the French; and is a corruption of the Latin proprietas, derived from proprieta, own, proper, &c. The Property, therefore, of any substance implies the own-state, or own-ness, of that substance; neither of which, the reader will admit, is so pleasing in sound, though they are both equally cogent in sense, with the word 'Property.' To these remarks I might add, that the Arabs appear to have turned the Greek idiotns, which had led to the Latin proprietas, into khassiyat; so that all three have exactly the same sense. This word, like kaifiyat, is still in common

use. Like the word Quality, a Property may be either Sensible or Intellectual. Thus Length is the Sensible Property of a string, as it can be discovered by both sight and feeling; but the Properties of the circle being only discoverable by the intellect, are purely Intellectual. From these remarks it is evident, that—

§ 70. Properties, from their nature, may be either Sensible, or Intellectual.

Of Peculiarity.

§ 71. The term Peculiarity is so familiar, and so obvious in its meaning, that, except for the sake of completing the whole view regarding Qualities and Properties, it might very well have been omitted. The Peculiarity of any thing is that which distinguishes it from others of the same class. As I shall immediately have to contrast Qualities, Properties, and Peculiarities with one another, the exact import of the last term will be sufficiently apparent, when brought into juxta-position with the two former: from which it will be seen, that Peculiarities, like Qualities and Properties, may be both Sensible and Intellectual. A Peculiarity, in short, is nothing more than a Quality that is of rare occurrence. Thus whiteness in a crow is a Peculiarity made known to us by sight, and is, therefore, Sensible; but timidity in a lion would, if observed, be an *Intellectual* Peculiarity; because such a Quality could only be ascertained by an effort of the intellect. Peculiarity is likewise used to express any unusual *Form* as well as state. The hump of the Indian cow is regarded as a Peculiarity in Europe; and the want of it would be considered a Peculiarity in India.

§ 72. Peculiarity, therefore, implies Unusualness, both of Quality and Form, in reference to the experience of the observer.

Of Quality, Property, and Peculiarity.

§ 73. Having explained the nature of a Quality and a Property, I mean now to define the exact manner in which they should be employed. By a Quality we always mean something adventitious; and which, though removed, in no way destroys the object in which it is commonly held to exist. Thus a flower may lose its fragrance, yet it will still remain a flower; but by a Property we invariably intend that which is essential to the very existence of the thing;—roundness, for example, in a ball. Thus, to exemplify these terms, we may assert, that the colour of a wheel is its Quality; roundness, its Property; and to be of metal, when it is usually of wood, its Peculiarity. Here we see the extreme propriety of the word 'Property;' which, meaning

own-ness, implies that it belongs to the thing itself, and that without the possession of which it would cease to be what it is: hence, likewise, its applicability to express our own possessions 29. All those attributes of bodies which metaphysicians call Primary Qualities are really nothing more than their Properties: these are, Figure, Length, Breadth, Extension, Impenetrability, &c.: for let us take away any one of these essentials, and the thing ceases to be. This fact is a proof that they reasoned not merely erroneously, but actually without any precise knowledge of the terms they employed. Nay, so inconsiderate were they, that they even included Motion and Rest, both implying States; and also Number, which is a Relation among the Primary Qualities: and perhaps the following extract from Berkeley's Essay on Human Knowledge will not be out of place, as demonstrating the inconsistencies of metaphysical "Some there are," he says, "who make a distinction betwixt primary and secondary Qualities: by the former, they mean extension, figure, motion, rest, solidity, or impenetrability and number: by the latter, they denote all other sensible Qualities, as colours, sounds, tastes, and so forth."—The reader must see, that in this division of Qualities into Primary and Secondary, besides its absurdity, it altogether omits those that are intellectual. When we reason

⁽²³⁾ That is, our own-state or -estate.

respecting the Qualities of any object, we fancy we have very definite notions about it; but were we to talk of its what-manner-nesses, though the term is much more significant, we should be at once aware that nothing could be more vague than our expressions; and that, consequently, our conceptions on the point must be most incomplete. With regard to Secondary Qualities, the notion is equally incorrect as that of the *Primary* division. For both I have substituted Sensible and Intellectual. It is worthy of remark in this place, as giving some insight into the nature of the human intellect, that people who have received a very slight education often apply the words Quality, Property, Peculiarity, &c. with the nicest accuracy, by a sort of contrivance in the frame of the intellect, that saves all effort on the part of the speaker; and yet the profoundest thinkers are in danger of falling into great inconsistencies, the moment they attempt to define and classify these or other Abstract Words. See the remarks in § 112.

Of Cause and Effect.

§ 74. In the whole range of metaphysics, there is not any subject that has been so much perplexed by philosophical inquirers, nor one in which language plays a more delusive part, than in that of *Cause* and *Effect*; and yet I think I shall be able to demon-

strate, that there is not any inherent difficulty in the question, if it be properly considered.

§ 75. It might have been presumed, that the very assertion that these words are related or connected (which is made by every one who speaks of the relation or connexion of Cause and Effect) might have saved so much misconception. But this would be to suppose that people felt30 the force of the words they employ. Both these terms are merely Abstractions of that class, which is called Relations and Correlations; and they, consequently, distinctly claim connexion with one another. Hence the Terms Cause and Effect are necessarily connected; for it is impossible to think of the word Cause, without its suggesting the notion of Effect; nor of Effect, without its calling up the conception of Cause. Those, therefore, who deny a necessary connexion between Cause and Effect should abstain from employing these Terms; for it is as preposterous and inconsistent, as it would be to speak of sunrise and sunset, and yet to deny the existence of the sun. Cause and Effect, then, being nothing but a Relation with its Correlation, and such words being mere States, it is only necessary to reflect for a moment, and we

⁽³⁰⁾ If this be the case with our own expressions, there exists but little chance of being rightly comprehended by others. I have myself been the object of misrepresentation, because a Reviewer could not discriminate between a "a reasoning being" and a rational being!

shall be certain that all we intend to express by them is, that we conceive that the first State (Cause) produces a second or correlative State (Effect). Again, if we ask ourselves the exact meaning of these two States, we must feel, that that which implies Cause, means the State which alters (not some other thing, but another STATE); and that which signifies Effect, the State which is altered: or, if we use compound Terms, they may both, respectively, be expressed by the Altering-STATE and the Altered-STATE; for the whole process of the mind in Reasoning is, like that of Calculation, purely abstract. And here I think it right to remind the reader, that whenever we wish to avoid the use of the term 'Cause' or 'Effect,' we ought to remember that we have the alternative of employing simple, in place of abstract language. Thus, if we do not desire to use the abstract word 'Cause,' in such a sentence as, 'Thomas was the Cause of William's death,' we can have recourse to the direct form, and say, 'Thomas killed William.' In the first of these two examples, the matter is just put as abstractly as if it were stated, algebraically, a = b; 31 and, consequently,

⁽³¹⁾ All Reasoning is solely carried on by means of Abstractions: and when such Abstractions are limited to number and quantity, they can then be represented by ciphers and symbols that are employed for that particular branch of reasoning called Calculation: the only difference between them being, that in common arithmetic we are obliged to supply (mentally) the connecting words required, such as, and, make, to, from, by, into, &c. For instance, 2 (and) 2 (make) 4; but in Algebra, the nature of the process required that the state of the Relations should

has nothing to do with either *physical* Agency or Power; but in the second, we may suppose the transmission of such power from the Agent to the Object, and producing his death.

§ 76. Having thus shown the Abstract character of Cause and Effect, I now proceed to demonstrate, that these words are also General in their nature, and, as such, are invariably the representatives of any Particular Conception. Thus we commonly say, if a wall fall upon a man and kill him, that The wall was the Cause of his death; but the wall merely stood in the Relation of Cause, and the Abstract Agency that is conceived to produce his death was the Falling (of the wall). But such sentences being always elliptical, they would, if fully expressed, enounce that The wall stood in the Relation of Cause to that Effect. It is no matter what sentence we may analyse, in which Cause is mentioned; for we shall find that the particular word which is the real Cause is a Noun of Action

be fully expressed; and they are accordingly represented by signs +, -, \times , \div , =, &c., which have superseded the more cumbrons use of words of the early stage of the science. Every one is aware, that a Calculation may be conducted in such a way, that the process shall not include the slightest error; and yet, that if the *data* were either insufficient or erroneous, the Calculation must be useless. It is the same with Reasoning; for if the facts are either incomplete or faulty, the conclusion any one may arrive at will be equally so. Hence it is clear, that we may reason with perfect correctness, and yet be quite wrong in the result.

ending in ing, such as that of Falling, just given; or in tion, in that of Ignition, which I shall mention directly. For instance, a hailstone breaks a window: it is not the hailstone, but its Breaking, that is the Cause of the Fracture. So if I say, Heat is the Cause of Fluidity, it is, Heat stands in the Relation of Producing to the abstract result Fluidity. Cause and Effect, therefore, are the mere General Forms which the intellect employs in place of the particular expression which the case requires, as is discovered the moment the sentence is analysed. In the instances of Falling, Breaking, and Producing, as the Particular Notions represented by the term Cause, we must see that they all denote the altering-STATE, or action of the wall, the hailstone, and the heat; and the results that arose from them respectively, namely, Death, Fracture, and Fluidity, were the altered-states of the man, the window, and the solid, as the objects affected by them. This points out why we cannot with propriety say, I cause it; for if we could use this expression, we could equally well employ, I breaking it, I producing it. It is different, however, with the word fracture: for as we can say, I fractured it, so we can also say, I effected it. When Cause is employed as a personal agent—as when we say, He was the Cause of it—we actually make as great a mistake as if we said, He was the Breaking of it: and in those languages that employ a word equivalent to Causer, the error is as great as if they added er to the word Breaking, or

any other noun implying Action, and said Breakinger, Producinger, 32 &c., instead of employing Breaker, Producer, &c. See § 110. It is obvious, therefore, from the whole tenour of these observations, that Cause and Effect are the most General Notions we can trace of any Abstract Agency; and that whether we say The Breaking produced the Fracture, or The hailstone broke the window, we do in neither case, that is to say, either by the abstract or the simple form of expression, allude or refer openly, or covertly, to Cause and Effect. To do so, then, we must invariably and explicitly say, or understand, such and such an Abstraction is the Cause, or is the Effect; but when we consider it under this aspect, we then call into operation one of the most General Forms of expression the human intellect has at its disposal. Where, therefore, there is no knowledge of language, there can be no Cause and Effect. No one will suppose that a horse thinks of either, when he feels the rider's leg move to give him the spur; yet it is sufficient to make him mend his pace.

§ 77. The process by which any one might form to himself the notion of this Relation may be explained

⁽³²⁾ The word Widower affords an excellent example of the mistakes we fall into, when we are not aware of the exact import of the original term which we take as a basis. Widow, like the Latin vidua, is derived from the Sanscrit viduava, that is, vi without diavas, a husband; so that 'Widower' implies a man without a husband, if we refer it to its Sanscrit originals; but a he-widow, according to its English derivation.

as follows. Suppose a child to apply a piece of paper to a lighted candle, he would see it take fire and disappear; and if asked about it, would simply reply, that the candle had burnt the paper: but he would not have the most remote conception of Cause and Effect; and that for the best of reasons, namely, that he had no knowledge of this or any other Relation. We will suppose him arrived at maturity, and to make a repetition of the same act. Having by this time become master of the phrase 'Cause and Effect' and other Abstractions, he could now say, that the *candle* was the Cause, and what took place, the Effect; and so he would think he knew all about it: but if we suppose him to be able to reflect, we may imagine him to have some knowledge of the real value of words, and, consequently, to feel that the term 'Effect' was but an Abstraction, and, that though he had thought the candle to be the Cause, this could not possibly be the case, as a Concrete Thing (the candle) could not produce the Abstract State 'Effect.' After a little consideration, he would see, that if the Correlation 'Effect' was an Abstraction, its Relation must be equally so. He might then ask himself what was the particular Effect that occurred in the instance of the candle, and he would feel that it was 'Combustion.' The moment he was aware of this, he would seek for the particular Abstraction that the mind required to stand in Relation to it, and he would discover that it was

'Ignition 33.' He would now feel that the Ignition (by the candle) produced the Combustion (of the paper); and, that when the matter was expressed solely by General Language, The candle only stoop IN THE RELATION of Cause (the ignition) to the Effect (combustion), and that both Cause and Effect were simply Abstractions of the highest generality, and not Things. If acquainted with the elements of algebra, he would be aware that he could not say candle = b; but, that if he used the abstract sign b, he must compare it with another sign equally abstract, and he would consequently say a = b. This shows to what an extent metaphysicians have deceived themselves, in supposing that Things and Physical Power had any thing to do with the Abstract and General Conception 'Cause and Effect.' And as to the sequences they talk about, these, though they do exist in a limited degree in nature and art34, have nothing to do with the intellectual sequences which are alone connected with this Relation. For instance, A Good Disposition and Cultivation stand in the Relation of Causes to Good Principles: these, too, stand in the same Relation to Virtuous Actions; and these, again, to Happiness. Not-

⁽³⁾ Here it is evident that ignition is the altering-state, and combustion the altered-state. The previous state of the paper was cohesion, in which combustion has induced a change of State or condition; that is to say, such is the Abstract Expression of the fact: but the simple truth that is evident to the senses is, as a child would express himself, that The candle burnt the paper.

⁽³¹⁾ See § 11 of Note (B) of the Appendix.

withstanding, however, the continual reference made by Hume and others to the notion of sequence, there are very few sequences in nature which stand in the Relation of Cause and Effect. Thus, one season does not produce another;—Winter does not give rise to Spring;—nor does the greenness of the leaf in Spring occasion the brown tint observed in it in Autumn;—the flow does not force on the ebb of the tide, nor the ebb the flow;—neither does day draw on the night, nor night the day. The Antecedents, in all these cases, are not the Causes, but the Conditions of their Consequents; the only Relation they stand in to one another being that of Contrast.

§ 78. The word Cause is so often confounded with Reason and Motive, that I feel that the next step should be to clear up the ambiguity. Let us suppose we saw an infant lying dead, which we expected to find alive and well, we should naturally ask What was the Cause of its death? and if we were answered Neglect³⁵, the Cause would then be assigned: but if we asked again, By whose neglect? and were told, By its mother's, our knowledge of the Cause would be enlarged, by being put in possession of the Reason: and if we pushed our inquiries

⁽³⁵⁾ Here we see an instance that an Abstract Word can stand in the Relation of Cause;—a thing never suspected—to such an extent has this question been misunderstood. Cause always represents abstract, and never physical agency.

further, and demanded ON what account? and were answered, From her antipathy to it; we should then have the Motive, as we already had the Cause and the Reason of its death. Here we see, clearly, why these notions are so closely connected together in the mind: and, as it will be necessary, hereafter, to investigate each of them in its proper place, I shall content myself with having pointed out the reason of their being so often substituted for one another. Having premised these general remarks, I proceed to consider the most celebrated opinions that have been held with regard to this Relation, from antiquity to the present time: begging the reader to bear in mind, that Cause and Effect do not exist in the works and processes of nature and art, but only in the Conception of the mind that reasons upon them 36.

§ 79. Pyrrho was the first great doubter, among the Greeks, who seems to have been deluded by the trickery of language. The opinion of himself and followers, as handed down by Diogenes Laertius,

⁽³⁶⁾ When I speak of Conceptions existing in the mind, in any part of these remarks, and the reader remembers that I say Conceptions are mere words preserved by the memory, he must not suppose that I contradict myself. In §§ 156—165, I have shown what the phrase 'The Mind' really means. Conceptions exist, then, in the forms of speech that constitute what we call 'The Mind,' but not in the Intellect. See § 158, and the last sentence of § 17.

and interpreted by Sir James Mackintosh 37, is as follows:-" Causation they take away thus. A Cause is so only in relation to an Effect. What is relative is only conceived, but does not exist; therefore cause is a mere conception." Now, every word of this is as true as that two and two make four 38; but the inference he was said to draw from it was altogether a delusion, from his ignorance of the nature of language. That Cause is only a Relation, every just reasoner will allow; and that Effect is the name of its Correlative Relation, will be equally granted: but when this is done, and we admit that Relations are only creatures of the mind, we have in no respect done away with the things or persons that we have *conceived* to be related; and when it was said that Pyrrho would not get out of the way of a carriage, because he had convinced himself that Cause and Effect were mere Conceptions, he was as absurd as a man who should say to himself, 'Father and Son are mere Relations: now, as all Relationship is a mental Conception, there are no such creatures as

⁽³⁷⁾ Note (Q) in Sir James Mackintosh's Dissertation on the Progress of Ethical Philosophy.

⁽³⁸⁾ I had printed an Essay on Cause and Effect, to prove its Conceptional Character, before I was aware that I had been anticipated by Pyrrho. I have reprinted it in Note (B) of the Appendix. That part which related to *Power*, and which did not strictly belong to the question of Cause and Effect, will be found under §§ 126—130 of the text; and some remarks on "Ex Nihilo, Nihil fit," in Note (D) of the Appendix.

men, and I will not, therefore, get out of the way of that mad Son of mine, who threatens to run me through with his sword.'—The absurdity of this last instance is too strong to require any other comment, than that it would have been strictly in accordance with the notions and conduct attributed to Pyrrho, if we do not relieve him from the imputation of being so very inconsistent, by supposing that his extreme scepticism had raised him up enemies, who have wilfully misrepresented his opinions: he must have been too well aware, that the Conceptional Character of any form of speech, in which a fact may be described, cannot re-act on the fact itself, and disprove its existence.

§ 80. The delusive influence of language over the mind is equally shown in Algazel, the Arabian: for of him it is said, that "he denied a necessary connexion between Cause and Effect; for of two things, the affirmation of the existence of the one does not necessarily contain the affirmation of the other; and the same may be said of denial". When Algazel denied a necessary connexion between Cause and Effect, he quite overlooked the fact, that these two words were not merely Relations, but that they were, moreover, of that kind in which, as I have before said, Effect is the Correlation of

⁽³⁹⁾ See Note (Q) in Sir James Mackintosh's Dissertation on the Progress of Ethical Philosophy.

Cause; and that, by this very circumstance, they imply one another, and consequently must be necessarily connected. Cause must, therefore, as uniformly suggest the notion of Effect, as Father does that of Child, and Husband that of Wife. But when we have convinced ourselves of this fact, it still cannot be applied to prove, as Algazel remarked, that, of "two separate things, the affirmation of the existence of the one necessarily contains the affirmation of the other." Algazel, therefore, was both right and wrong. He was wrong in his inference, which is the leading member of his sentence; and he was quite right in the last clause, which is that from which he drew it, though his assertion was a mere truism. His mistake arose from his not being aware, that, in the first case, he was dealing with Abstract Relations; and in the other with Realities, as is proved by his employing the words "two separate things": he, consequently, made the mistake that is inevitable from confounding together these opposite classes of words. Algazel's error is that of all metaphysicians. They forget that the Perception is a Thing; but that the RELATION in which it stands is a mere Conception. Now, the Cause being a Relation, it leads to interminable confusion in reasoning, to suppose it and the thing related to be one and the same. He likewise fell into another error, that is uniformly made by those who reason on the nature of Cause and Effect; and not merely

forgot that these words are simply Abstract Relations, but that an Effect, no more than a Cause, can ever be a "Thing," but a Change produced by that which the mind conceives to stand in the Relation of Cause: which change is properly called an effect, and not a "Thing:"—nay, so far from this being the case, any one has only to attend to the course of common conversation, or to the works he may read, and he will find, that we as often refer to a single abstract word a whole sentence, or even a long detail of facts, as standing in the Relation of Cause, as we do to "Things"—and for the same reason;—we equally assert that another word, or set of circumstances, was the Effect. Thus we say. Virtue is the Cause of Happiness; in which that which stands in the Relation of Cause is a single word, and that an Abstract one too, while it amounts to a whole sentence, in the following remark:—The Cause of the fickleness and injustice of the multitude (Effects) does not merely arise from their ignorance and envy, but from their acting at all times under the impulse of the moment, instead of their being guided by the dictates of reason and reflection: and from the same Causes there can be (Effects) no stability in democratic communities, if they are not driven into a state of union, by pressure from without—a position that quickly awakens them to a sense of gratitude, and obliges them to look again for assistance from those who had proved themselves the tried friends and benefactors of the commonwealth ⁴⁰. So, also, Gibbon might have summed up the contents of his great History, by saying, Such were the Causes that led to (Effects) the decline and fall

(40) The unworthy treatment experienced by Aristides and Scipio Africanus, two of the greatest patriots, as well as the best men of antiquity, will sufficiently support this opinion. Those who admire Republics will point to the United States of America; but they should remember, that its back-woods are the safety-valve, where the more daring and restless spirits of the nation can find a proper scene for their activity; and that but for this relief their system must have The United States afford the extraordinary exploded long ago. spectacle of a People without a Government; for an Executive that is under the necessity of fulfilling the bidding of the populace at every effervescence of feeling, is no Government, in the proper sense of the word; as this term can only apply to that which is able to controlnot foreign nations—but its own people. If there is one name more than another that the Americans must revere, it is that of Washington -and one for whom, perhaps, they can never hope to produce a parallel: but let them remember, that his integrity, straightforward conduct, and disinterestedness, were not the result of their system, but of that which gave birth to the moral dignity of a Chatham, and the host of other illustrious men, for which Great Britain will be renowned as long as history endures. It is English Institutions that have reason to be proud of Washington, and not the North-American Republic, which was the offspring, and not the parent of the Deliverer of his Country. Every good that America can boast of, she has derived from the Parent State: and she would commit the parricidal act of destroying her if she could, because she cannot forget the injustice of one obstinate Ruler, who was never countenanced in his coercive measures by our wisest statesmen, nor by the nation at large! Docs she suppose, for a moment, that either self-respect or glory would result from the success of such an effort? No: foreign nations would only exult, and exclaim, "Thank God, one portion of the Anglo-Saxon race is extinguished as an empire! May the remainder soon perish, by its own turbulent and unruly hand!"

of the Roman Empire: yet, in all these instances, that which stands in the Relation of Cause is not a "Thing"; nor does it convey the notion of physical agency.

§ 81. The opinion of Saint Thomas Aquinas being identical with that of Hume—indeed so much so, that the latter is supposed to have derived it from him—it is only necessary to mention his name here, in the chronological order in which this celebrated man lived: and I pass on to Locke, who is the next great authority, and who seems to have been quite ignorant of the important truth discovered, and misapplied, by Pyrrho; namely, that the Relation of Cause and Effect was merely a mental Conception. The definition Locke gives of Cause and Effect is as follows 41:—A cause is that which makes any other thing, either simple idea, substance, or mode, begin to be: and an effect is that which had its beginning from something else. Here Locke, in assigning his notion of Cause, explains his conception of an Effect at the same time: and he then tells us again, in less express terms, what he considers is an Effect. So far from thinking Cause a Relation, he says it is "that which makes any other thing, either simple idea, substance, or mode, begin to be." He has here been misled by the

⁽⁴¹⁾ Bk. II. Ch. xxvi. § 2.

meaning of the verb To cause (see §§ 93,110), and converts a Cause into an Agent or Maker; and an Effect, so far from being the mere change (altered-state) resulting from the action of that which stood in the Relation of Cause, he considers as a "simple idea, substance, or mode," which the Agent has made to "begin to be." The definition is at once verbose and erroneous; for if a production or creature can be said to be an Effect—that is, a change—there is an end to all distinctions of language.

§ 82. The foregoing remarks on Locke's notion of Cause and Effect will be sufficient to show that he had not a true conception of the nature of the Relation; and that, in fact, like all other philosophers who went before him (Pyrrho excepted), he conceived that things could be both Causes and Effects. I now, therefore, proceed to consider the remarks of Hume, who has done more than all other writers to perplex this question: and as his authority has had great influence, it will be necessary to consider his opinions with the closest attention. He sets out by saying 42, "that all reasonings concerning matter of fact seem to be founded on the relation of Cause and Effect. By the means of that relation alone we can go beyond the evidence of our memory and senses." He then, a little afterwards, says, "Causes

⁽¹²⁾ Essays, Vol. II. Section II.

and Effects are discoverable, not by reason, but by experience." But to show that, when he made use of the terms Cause and Effect, he had not any idea of their true nature, it is only necessary to attend to the following quotations:—"All the operations of bodies, without exception, are known only by experience." Again:—"When we reason à priori, and consider merely any object or cause, as it appears to the mind, independent of all observation, it never could suggest to us the notion of any distinct object, such as its effect; much less show us the inseparable and inviolable connexion between them." Finally, his two formal definitions of Cause and Effect may be brought in evidence:—

"Similar objects," he says, "are always conjoined with similar. Of this we have experience. Suitably to this experience, therefore, we may define a cause to be an object, followed by another; and where all the objects, similar to the first, are followed by objects similar to the second: or, in other words, where, if the first object had not been, the second had never existed. The appearance of a cause always conveys the mind, by a customary transition, to the idea of the effect. Of this, also, we have experience. We may, therefore, suitably to this experience, form another definition of cause; and call it, an object followed by another, and whose appearance always conveys the thought to that other. But though both these definitions be drawn from circumstances

foreign to the cause 43, we cannot remedy this inconvenience, or attain any more perfect definition, which may point out that circumstance in the cause which gives it a connexion with its effect."

Now, if the reader give but the most cursory attention to these extracts, he will feel that Hume had totally mistaken the nature of the Relation, and that he was considering the observed operations and phenomena of nature—in which, of course, he sought in vain for a necessary connexion,—and not the purely intellectual distinctions, which we set up as often as we reason upon those operations, when we consider them in the abstract. That we know nothing except from experience, few would have been inclined to doubt, after the perusal of Locke's work. To give, therefore, Hume the benefit of being merely consistent in his arguments, we must always understand that his objects, or causes, are

⁽⁴³⁾ Hume, by this remark, apparently alludes to the notion of *Power* as the true Cause; but neither he nor Locke had even imagined that there could be a distinction between Abstract and Physical Power: both metaphysicians were Realists, and therefore every thing they spoke of was, in their imaginations, equally *real*.—See Note to § 123.

⁽⁴⁴⁾ Essays, Vol. II. Section VII. Part II.—Not to distract the reader's attention, I have not made any observations on the verbal inaccuracies in the above extracts; but in §§ 85—88, he will have specimens of the internal constitution of Hume's arguments, that will show him how unsafe a guide so loose and vague a reasoner really is; and how much he dealt in mere phrases, and words of which he had not previously fixed the meaning.

not Abstract Relations, but the real Things 45 we discover by our senses. He, consequently, argues to show, that we know nothing of the nature of the necessary connexion between Objects, that is, why one change follows another; and that therefore we have no authority, but Custom or Habit 46, for attributing a necessary connexion to Cause and Effect; two mere Abstract Relations, that I have shown to be inseparably connected by their related existence in the mind. When he said, therefore, that it was " by means of the relation of cause and effect we are enabled to go beyond the evidence of our memory and senses," he was really drawing strongly upon the want of reflection to which mankind are prone on such subjects; for who thinks of either Cause or Effect, when he calls to mind a kindness or an injury, or the scenes and friends of his childhood; and yet no one doubts the excellence of his memory and senses with regard to the past. It is evident, therefore, that when Hume attempted to prove that the universal notion of the necessary connexion between Cause and Effect is only derived from Experience, he fell into a palpable fallacy. He overlooked the fact, and, as I have shown, the very important distinction too, that the necessary connexion between Cause and Effect, as mere Abstract Relations.

⁽⁴⁵⁾ Hume invariably considered Things in operation as Causes.

⁽⁴⁶⁾ It is clear that Hume did not feel the distinction between these two words. See § 41.

exists in the mind, and not between the phenomena of nature; and it therefore follows, that the question of Cause and Effect has nothing to do with that of Experience;—a consequence that could not fail to have been perceived by Hume, had he known what was the true nature of the Relation; but, from what I have already said, and what remains to be shown, it is clear that neither he nor his predecessors, with the exception of Pyrrho, had any but the most crude conception of its character. His Essay will always remain as a proof how much a fine composition will serve, as an impenetrable veil, to conceal the greatest fallacies and inconsistencies; but so far from throwing any light on the Relation of Cause and Effect, he might just as well have danced an elegant minuet in its place: indeed, he has, by his authority, thrown such a gloom over the question, that those who have since reasoned upon it have not been able to see their way, in the least, through its perplexities.

§ 83. So, after all the parade made by Hume in this Essay on a necessary connexion, and which he evidently flung amongst metaphysicians with the same glee that Zeno did his sophism relating to Motion, it turns out that this modern Achilles, like its celebrated prototype, is nothing more than an oversight. It would indeed be strange, if the human understanding were so "ignorant and weak" as

he supposes it, and that it had such a universal conviction without any just foundation;—in short, that it believed in what there was no warrant for believing, and that equally among the most savage as well as the most civilised races, in ancient as well as in modern times.

- § 84. It will not, perhaps, surprise any one, after these remarks, that Hume should make another mistake in the same Essay; though he had unwittingly fallen upon the true distinction by the mere forms of routine phrases, when uninfluenced by system: for in the following passages he has employed the word Event; and yet, inconsistently enough, immediately after uses Object as a synonymous term. The mistake is greater than that made by Algazel; for he confounded Things with Abstract Relations: but Hume, in this case, has committed the error of making an Event the same as an Object. His words are—
- § 85. "Solidity, extension, motion ⁴⁷; these qualities are all complete in themselves, and never point out any other *event* which may result from them. The scenes of the universe are continually shifting,

⁽ii) Hume borrowed the words solidity, extension, and motion from Locke; as may be seen by referring to § 184 of this work. This is the way new systems are built up: old materials are taken without any examination of their soundness, and few men quarry for themselves.

and one *object* follows another in an uninterrupted succession; but the power or force which actuates the whole machine is entirely concealed from us, and never discovers itself in any of the sensible qualities of body ⁴⁸."—

§ 86. We should certainly think that any one who might write a passage like the following had a greater knowledge of phrases than of the things he was describing:—

"Guns, balls, gunpowder; these qualities are all complete in themselves, and never point out any other event which may be produced by them. The scenes of an arsenal are continually shifting, and one object follows another in uninterrupted succession; but the care or attention which regulates the whole magazine is entirely concealed from us, and never discovers itself in any of the sensible qualities of the materials of war."—

§ 87. Perhaps the above farrago will rather startle the reader, though he may have read the passage which has given rise to it without his attention being roused. Yet, what causes this difference of judgment? Simply this; that from his infancy he has been familiarised with the objects just enumerated, and he is at once aware of the incongruities heaped

⁽⁴⁸⁾ Essays, Vol. II. Section VII. Part I.

together: but, in the other case, he does not, perhaps, feel the exact value of each word; because they are mere Abstractions, the import of which can only be learned by a thorough knowledge of language and deep reflection. For, in those matters that are above our comprehension, we are too apt to be contented with periods that are elegantly turned, and in which an easy flow of language prevents us from suspecting inconsistency. We must therefore be convinced, that, in such cases, our imagination is, at the best, but agreeably soothed and tickled by an harmonious concord of sounds, arranged in such correct grammatical dependence, as must always full our attention, and, consequently, prevent us from detecting the imposition that has been practised upon our judgment. But, to show that the above representation is not overstrained, I proceed to the analysis of Hume's own words.

§ 88. Now, passing over the fact, that Solidity and Extension are properties, and not qualities, and that Motion is a *State*, and neither a *property* nor a quality, and that not one of these words, moreover, can, even by the utmost torturing of language, be called an Event, we must still admit that there exists a singular degree of confusion in this passage: for how could it be expected, by any one who knew the exact import of words, that "the power or force

which actuates the whole machine" should discover "itself in any of the sensible qualities of body"? The operation of "power or force" sufficient to move a machine can only be discovered by the Motion of some of its parts; and such Motion is not a "sensible quality," but, as I have just said, a State; and how could it be produced by either of the Abstractions, "force or power"? But it must be further seen, that Hume employed the word Object in the same sense as Event; and, if the reader has any misgivings on the subject, he will find this fact placed beyond all doubt, by attending to a second quotation I shall make. It is very likely that he has, like myself, often read both these passages without ever feeling the nonsense they contain. This will prove to him, how easy it is for us to trip lightly over what is written with smoothness and elegance; and how necessary it is to weigh every expression where truth is at stake. The same confusion subsisting in his mind as in the former passage, he says-

"But when one particular species of event has always, in all instances, been conjoined with another, we make no longer any scruple of foretelling one upon the appearance of the other, and of employing that reasoning which can alone assure us of any matter of fact or existence. We then call the one object, Cause; the other, Effect. We suppose that there is some connexion between them; some power

in the one by which it infallibly produces the other, and operates with the greatest certainty and strongest necessity 49."

§ 89. These are interesting instances how an acute and powerful mind may be betrayed into false reasoning, by not possessing an accurate and almost instinctive feeling of the force of words. Even the first sentence in the above passage is incorrect in reasoning and expression, because he makes the word Event 50 stand for both Cause and Effect: and so also in the next, for the mere sake of avoiding tautology, he employs Object for Event. It is difficult, however, to imagine how he could have fallen into the error of supposing an Effect to be an Object, even if he knew not, or had forgotten, that both it and Cause are merely Abstract Relations? Indeed, the whole passage is a tissue of absurdities.

(49) Essays, Vol. II. Section VII. Part II.

(50) Hume may have taken the word 'event' in the sense of occurrence, instead of the consequence or result of an action, which is what the subject demanded. Either 'Effect' or 'Change' would have been a much less ambiguous term for his purpose, than 'Event.' It has, however, become a favourite expression with succeeding metaphysicians: mankind seem led to copy one another, by the same uncrring instinct that makes a flock of sheep follow the bell-wether.

These views were written while I had not an opportunity of consulting Hume's work on Human Nature: but his Essays, and the passage already quoted, will show that he used the word 'Object' systematically; and it follows, that 'Event' was only introduced by way of changing the phrase. The confusion of thought that led to his making an indiscriminate use of these two words, in a similar sense, is remarkable.

§ 90. It is seldom that any error is detected, which is of itself not obvious, till it has produced its full consequences: and then the extreme case, at which the understanding has arrived, being evidently absurd, even to the multitude, those who assume the airs and name of philosophers are reluctantly forced to reconsider the steps that have led them to such extravagant conclusions; when a fresh inquiry often helps them to discover the first step that led them into their error. The misconception of Hume gave rise to no less a consequence than the extraordinary work of Kant, called "The Critick of Pure Reason"; but though this renowned production of misapplied genius, on its first appearance, startled every person of sound sense, yet the fallacy upon which it is founded was so far from having been detected, that the work has even won the applause of many who were the first to feel doubts respecting its truth. Hume had, by his false reasonings, so perplexed the question of Cause and Effect, that the minds of men were ready for the reception of almost any solution of the difficulty he had started regarding a necessary connexion; and though he had said that the true solution was, that it arose from Custom or Habit, yet Kant at once saw that this could not possibly be the case; but then he did not, at the same time, perceive that Hume had attributed this connexion to the phenomena of nature, and not to its real constituents-mere Abstractions,

that we employ as Antecedents and Consequents in reasoning. Kant, therefore, began to hunt about for some better solution of the problem of error than Custom, and he thought he found it in Necessity. Reflecting upon this supposed discovery, he considered, that if the human understanding had this one Conception not drawn from that grand storehouse of our knowledge—Experience, which Locke had laid open to mankind, we might have more; and from this notion he deduced his twelve celebrated Categories or intuitions, on which he built his transcendental system. As these are too important to be omitted in this work, the reader will find them more appropriately considered in \\$ 185—192. However, it will be as well to see what hints can be found of Kant's own notion of Cause and Effect. First, then. it will be thought not a little remarkable, that a mind so logical as his should have uttered a phrase so near the truth, as that "Every change has its cause 51," without feeling that the word 'change,' being an Abstraction, its true Antecedent must necessarily be an Abstract Word of the same nature. Had he but seen this inevitable conclusion, he would have been at once led to feel that the two Conceptions or words stood in the state of Relation and Correlation to one another, and that therefore, as such, they (but not the phenomena of nature) were

⁽⁵¹⁾ Pp. 4, 6 of The Critick of Pure Reason.

necessarily linked together in the mind. But having persuaded himself, that though Hume's solution was faulty, yet that the view he had taken of the Relation was right, he brought himself to believe that the notion of the connexion between the operations and phenomena of nature, instead of being derived from Experience, exists through the constructive form which pure Reason (see § 191) confers, through its absolute nature, upon the materials presented to it by the Understanding (§ 190). Upon this unsound foundation it was that Kant built up his fallacious system,—an inverted pyramid, which rests, like the Mercury of John of Bologna, only on a breath 52 (necessity). To the dark and intricate convolutions of Kant's systematic and logical brain must be attributed the order, symmetry and obscurity that have at once delighted, astonished, and confounded his readers. But when he placed such reliance on Hume, and made so capital a mistake,

⁽⁵²⁾ Shakspeare, who seems to have observed every thing that came within his reach, appears to have had in his eye the beautiful and graceful statue of Mercury rising from the breath of Zephyr, in these lines:—

[&]quot;A station like the herald Mcrcury, New-lighted on a heaven-kissing hill."

The puffed-out cheeks of Zephyr, when the figure is viewed in front, from below, bear a strong resemblance to a hill: and a friend, in my presence, though possessed of excellent sight and judgment, made this mistake, at the first glance he took of a small plaster cast of this fine specimen of modern art.

he was not aware that the Conception of Necessity, like all other notions, being a mere Abstraction, has no other existence than as a word; and that had Locke even been in error with regard to the doctrine of Experience, it gave him (Kant) no grounds to establish a system, built entirely on mere Abstract Relations, that are only so many symbols for reasoning;—the very ability displayed in his work being the more pernicious, by its tendency to fetter the understandings of mankind, already too much enslaved and oppressed by the misconceptions of preceding writers.

- § 91. Any one who has attended to the tenour of the preceding remarks, as well as to the arguments of modern writers, will be at no loss to discover that the sources of error on this question by metaphysicians are threefold:—
- § 92. First. They consider a Thing or object as being a Cause; and they do the same likewise with regard to an Effect. The consequence of this misconception is, that though they talk of the Relation of Cause and Effect, when the context leads them to the right term, they utterly overlook their own inconsistency, and forget that an Abstract Relation cannot imply either a Thing or object.

§ 93. Secondly. Deluded by language, they suppose

that a Relation can be converted into a verb, and that the verb to cause has therefore the same sense as the Relation of Cause. Now, to cause meaning "to effect as an agent," they are evidently talking of an Agent, when they suppose they are speaking of the Relation of Cause and Effect; and then, carrying out this error a step farther, they imagine the term Causation, implying "the act or power of causing," that is, of effecting like an Agent, means the relation of Cause and Effect also; though we have seen that any abstraction, sentence, or chain of reasoning can stand in the Relation of Cause.

§ 94. Thirdly. Having got so far into the error of substituting Agent for Abstract Agency, we find Hume, very naturally, going one step farther still than his predecessors, and inquiring into the notion of Power, which must lie at the bottom of every question relating to the phenomena of nature. The magnificent and mysterious operations observable in the universe could not fail, therefore, to be the first subject upon which he would fix his attention: and seeing that one change follows another in an uninterrupted sequence, yet one in which human reason cannot discover any necessary connexion, he triumphantly turned round, and asked, How it is that mankind so firmly believe in the necessary connexion of Cause and Effect? Pleased with the

grand discovery he thought he had made of a contradiction between fact and belief, it may be easily imagined that he said to himself, 'Look now at the "ignorance and weakness" of the human understanding! see how it believes in what it can offer no reason for doing, and that, too, in what is of the first consequence to all belief!'

- § 95. The remedy for all this confusion is, not to talk of the Relation of Cause and Effect till we have a clear conception of its nature; and never, in any instance, to employ the word Causation for Abstract Agency, nor Cause for Agent: by which means we shall then cease to talk like the Schoolmen of such things as
 - 1. First Cause 53,
 - 2. Efficient Cause,
 - 3. Material Cause,
 - 4. Final Cause:

and we shall consequently bear in mind, that we are no longer speaking of *Relations*, but *Agents*; as the word Cause, in the two first of the above instances, has no other sense. The advantage that would

⁽⁵³⁾ The expression "Causa causarum" is incorrect; as the word Causa is here used in the sense of Agent; while Source or Origin is what is alone admissible, if we attend to Common Sense and Logic, two things that can never exist separately. The Arabic phrase Musabbbu Lasbab. "Causer of causes," though more correct in form, is faulty in conception. See §§ 76, 110.

attend such a reform would be, that we should then be aware of the superior clearness of our reasonings, if we called these expressions, respectively, by the name of

- 1. Creator, or Origin,
- 2. Operative Agent,
- 3. Matter, or Substance,
- 4. End, or Purpose;

because, in every process of thought, it is of the first consequence to have terms that are perfectly clear and unambiguous. We have still too many relies of the jargon of the *Schools*; and the sooner we dismiss them, the better.

§ 96. The foregoing remarks contain all, I think, it is necessary to offer on the Relation of Cause and Effect, when it is unconnected with Reason and Consequence, and the other Relations with which it is so often, and unavoidably, mixed up: and I therefore proceed to the consideration of these last; which will, moreover, be of use in helping to dispel any delusion the reader may still labour under, on this much misunderstood subject: and I therefore conclude this branch of the inquiry with three definitions of Cause and Effect, out of which the reader can select that which best suits the form of his mind.

§ 97. Whatever produces a Change, stands (in our

minds) in the RELATION of Cause; and whatever Change results from it, in that of Effect.

Or, in other words:—

Cause is that general relation which we contemplate as effecting whatever we see take place.

Effect is that general correlation which we conceive to result from that which stands in relation to it.

Or, again :-

Cause is the altering-state. Effect is the altered-state.

Of Reason and Consequence.

§ 98. The question of *Reason* and *Consequence* being, as I have already said, so much connected with that of Cause and Effect, the consideration of it naturally follows as the next in the order of subjects. It is singular, that its obvious connexion with Cause and Effect has been altogether overlooked in every investigation regarding the latter question; and still more so, when even a child appeals to the fact as often as it assigns a *Reason* for its actions. Yet, in every instance in which the word *Because* (by cause 54) is employed, we have an example of

⁽⁵⁴⁾ The common use of 'Because' is itself a proof how natural is the tendency of the mind to confound Cause and Reason together; for instead of 'Because' we ought to employ 'By Reason.' So we use, indifferently for one another, the expressions, 'Through this Cause,' 'For

the conjunction of these two Relations. Whenever, therefore, we employ this word, there is a Reason given in which we shall also see an example of Cause and Effect; and it is further of the greatest value, in placing beyond all contradiction and dispute the Abstract Nature of the word Cause. By its means, therefore, and that of the word Effect (which explains itself to every mind), we may satisfy ourselves that Cause never means a "Thing"; as has been supposed by all metaphysicians, if we except Pyrrho, though he knew not how to avail himself of the truth he had discovered. We shall likewise be able to ascertain, with perfect clearness, why Reason can be always substituted for it, at pleasure, as well as the word Motive, whenever it relates to a rational being; and we shall consequently see that the human understanding, so far from displaying "ignorance and weakness," as Hume supposed, is really always in the right, when left to its own discretion; and that its deficiencies are almost invariably the result of an attempt to force what we do not fully comprehend into some system that we have taken up immaturely. A case that may be illustrated by that of gravitation; which, when left to its own influence, brings down to the earth every

this Reason, 'On this Account,' and 'Therefore,' as if they had all one and the same sense. The word Reason itself is not altogether that which ought to be employed; as it is the Account, or explanation, which Reason renders to itself of the operations observed in nature and art, that we really intend by its use.

body, in the straightest line possible; while every attempt that human art could devise to facilitate that end would only have the effect of deranging this spontaneous effort of nature.

§ 99. If we examine with attention the operations of the human intellect, we shall find that they are, like those of every thing which we include under the general term 'nature,' perfectly uniform and consistent. If we wanted, for instance, to convince a savage from Terra del Fuego that a thing cannot both be, and not be, at the same moment, we must set about it in a similar manner that we should to prove it to an infant Locke or Hume. An examination of the languages of the most savage races will prove that they are fundamentally constructed on the same principles as our own: and let it not be imagined that this is a trifling fact; for only those who have reflected on language are aware of its complicated and exquisite mechanism. Uniformity in languages could not exist, if the mode of proceeding of the intellect was not fixed and invariable. There is, therefore, but one form of intellect common to mankind; but individuals and races will be found to possess it in different degrees. That this fact, as well as the extraordinary address of the intellect in the employment of language can admit of no dispute, will be evident, by attending to what I am about to say.

§ 100. In every instance that can be produced, in which we use the word 'Because,' we, by its means, give a reason for the Action or State that is the subject of what we are talking about. Sometimes it may be convenient to express the Reason that moved us to act: and we then term such a Reason the Motive. Hence it is evident, that the notion of a Reason is always involved in the sentence that assigns either the Cause or Motive; while the Effect or Act is equally involved in another sentence. A child will assign a Reason for its actions, and say, "I sat down BECAUSE I was tired," and similar phrases; and yet the profoundest philosophers have been completely mystified by their own ingenuity, the moment they have attempted to investigate the question. The real fact is, that the intellect is guided in some way that always enables it to effect its purpose, when left to its natural efforts; and is, almost always, thwarted, the instant it is interrogated, or called upon to give up a secret of which it knows no more than the bird does of the unerring instinct which instructs it to build its nest. Now, if we analyse the sentence given above, it will be at once admitted that we have a pure case of Cause and Effect, combined with a Reason and a Consequence.

Reason, and Cause: I was tired. Consequence, and Effect: I sat down.

§ 101. In this instance there is no mention of a

"thing," or "object"; and that which constitutes the Reason and Cause is the phrase, I was tired; while the sentence I sat down, is its Consequence and Effect; which likewise, it will be allowed, are not things or objects. We now see why Cause and Effect must necessarily be related; for every thing we assign as a Reason must necessarily be connected with that which it is intended to explain. One sentence, therefore, is the Reason and Cause, and the other the Consequence and Effect. But it will be as well to give a few more examples, to put this point beyond all doubt; and these I shall arrange under the well-known heads of Action, Being, and Suffering.

ACTION.

The deer tremble, because the lion roars.

Reason, and Cause: The lion roars.

Consequence, and Effect: The deer tremble.

The window is broken, because the boy flung a stone at it.

Reason, and Cause: The boy flung a stone at the window.

Consequence, and Effect: The window is broken.

BEING.

The lion devoured the man, because he was hungry.

Reason, and Cause: The lion was hungry.
Consequence, and Effect: The lion devoured the

The boy whips his top, because he is fond of play.

Reason, and Cause: The boy is fond of play.

Consequence, and Effect: The boy whips his top.

SUFFERING.

The iron grows hot, because it is hammered.

Reason, and Cause: The iron is hammered. Consequence, and Effect: The iron grows hot.

The ball rebounds, because it is struck.

Reason, and Cause: The ball is struck. Consequence, and Effect: The ball rebounds.

In all the foregoing instances, it is the whole sentence that stands for Reason and Cause, or Consequence and Effect, as the case may be.

§ 102. Having conducted the reader so far, I proceed to show him what are the Correlations of Reason, Cause, and Motive. Reason gives rise to a Consequence; Cause is a specific kind of Reason, and has its Effect; but Motive is a particular kind or variety of Cause, which produces an Act. So every Motive is a Cause, and both it and Cause are Reasons. To determine, therefore, in a definite and precise manner, whether any given case is that of Reason, Cause, or Motive, we have only to remember whether the leading sentence implies Action, Being, or Suffering. If it do not, it is a Reason unconnected with any notion of Cause; and its Consequence will likewise bear evidence of the fact, by

not implying a *Change*, which is the real meaning of every Effect; and such instances can only occur in scientific demonstration. On the other hand, a Reason that is conjoined with a Cause always contains an instance of Action, Being, or Suffering, as may be seen in the examples already given; and Motive and Act are the same as Cause and Effect, but can only be applied to a rational being. This particular kind of Cause will be clearly comprehended by an example:—

Motive: William was desirous of revenge.

Act: William killed Thomas.

§ 103. The foregoing instances will be sufficient to explain the nature of the difference between Reasons, Causes, and Motives; but it must not be forgotten, that many Reasons, Causes or Motives may combine to give rise to but one Consequence, Effect, or Act. To prove this, and to show that Cause never means a "Thing," or "Object," though every one of these may stand in that Relation, I may suppose an historian to give an account of the French Revolution. He might state, in great detail, all the grievances, real and imaginary, which the nation had endured; and then he might sum up the whole in the following words:—These were the Causes that led to (Effect) the temporary subversion of monarchy in France. And this example will, I think,

remove any remaining doubts (if they exist) from the mind of the reader as to the nature of these Relations; and he will likewise be aware, that though the Term Reason and Consequence has been heretofore overlooked, it is as much entitled to "a local habitation and a name" as the hackneved and misunderstood Phrase 'Cause and Effect,' which has solely obtained such exclusive currency through the misconceptions of metaphysicians, and is as subordinate to Reason and Consequence as a branch is to the trunk from which it springs. When we ask, What is the Cause of that Effect? we only demand, What is the Particular Reason of that Effect? a fact that may help to convince those that are still doubtful of the Abstract Character of Cause and Effect: for I suppose no one will contest the Abstract Sense of the word Reason. The four following Relations are all equally subordinate to Reason and Consequence.

Of Motive and Act, and Motive and Result.

§ 104. So much has been said of *Motive* and *Act* in explaining the two preceding Relations, that it will require but a few words on the present occasion to complete what I have to say. This particular kind of Cause, implied by Motive, may have two Consequences, according to the mode of proceeding of the Agent. If a mother destroy her child by neglecting

to nourish it, the Motive has its Correlation Result; but if she were to produce the same effect by violence, the Correlation of the Motive would then be Act; that is, the omission of her duty as a parent gives birth to Result, and the commission of violence to Act. Hence, in speaking of this Relation, we must say Motive and Act, or Motive and Result, according as we are aware of the Reason that has moved the Agent to one or the other.

Of Origin and End.

§ 105. The notion of a First Cause contains in itself the assertion of a beginning: hence the Deity is often spoken of under such a term, when the word Origin would be more appropriate; and we ought, for the same reason, to employ its Correlation, 'End,' in preference to Final Cause. Every case of Agency and Act, as well as of Source and Product, may be considered, in relation to Cause and Effect, as Origin and End. The idiom of our language may sometimes require us to employ the word Beginning, in preference to Origin.

3 Of Agency and Act.

§ 106. When we speak of any operation in nature or art, without reference to a particular Agent, we employ the word Agency; and we can then consider it in Relation to the *Act* that results, which is

its Correlation. This Relation is often substituted for that of Cause and Effect; but quite erroneously; for the latter only expresses *Abstract* Agency, while the former, though used in a general sense, always indicates Agency that is *Physical*.

Of Source and Product.

§ 107. So intimately are the six relations I am now explaining connected together in our minds, that we are continually substituting them for one Thus the Deity, as the great Source of the universe, is continually represented as its Cause, and we speak of the universe as the Effect; but as an Effect only means a Change, we should be more correct in saying that it was a Product, which proceeded from him as its Source: for every production must be contained in its Source; and it was this fact that misled the Hindu metaphysicians into the error of confounding Source and Product with Cause and Effect. 55. The word Source has been borrowed from the French language, and loses it real sense of Fountain or Spring in the figurative use to which it is applied in this Relation; and the same may be said of Product.

§ 108. I have now given the six Relations complete; and those that may still contend that the

⁽⁵⁵⁾ See §§ 5 and 10 of Note (B) of the Appendix.

words Cause and Effect mean Objects, Things, or Persons, must be prepared to maintain the same opinion with regard to Reason, Motive, Origin, Agency, and Source, as well as Consequence, Result, End, and Act, if they wish to pass for consistent, though erroneous reasoners.

Of Causation and Causality.

§ 109. The word Causation, by its etymology, implies the ACT of causing, or making to do; and Causality, the STATE of being Causal. The first is more particularly employed by English, and the latter by French, metaphysicians; though by both, in cases exactly similar. But the import they have in the minds of those employing them (if they have any) I have found it very difficult, nay, impossible, to comprehend. They are only alluded to here to show the very vague and indistinct manner in which words of the first importance in reasoning are used; and the little hope, therefore, there must exist of their being comprehended, to any useful purpose, by those who read the works in which they are Had those who discussed the question of Cause and Effect known its true nature, they never would have employed either the word Causation or Causality. Their use of the word Causation shows that it was meant to imply Physical Agency, which has nothing whatever to do with the Relation of Cause and Effect; and they were led into this mistake, as I before said, by the verb to cause, which means, "to effect as an agent."

§ 110. Before quitting this subject, therefore, it will be as well to inquire into the origin of this mistake. Neither in the Greek, Sanscrit, Bengali, nor Hindustani, any more than in the Arabic or Persian languages, does there exist a verb with the exact sense we imply by 'to cause.' Our English verb is undoubtedly derived from the French causer; and this last, in all probability, has been formed from causo, which Dr. Johnson assigns as the original stem of causation; and says, it is low Latin. this be the case, it was not, then, till that language had been barbarized, and its genuine spirit forgotten, that this most illogical term was introduced, and, most likely, by some of the Schoolmen. It has, of course, taken too deep root to be now discarded from the philosophical terms of European reasoners: but whoever employs any one of its derivatives, such as Causation, Causator, Causative, or Causable, should ever be alive to the misconceptions into which its use may lead him. The words Causal, and Causality, derived from low Latin, must be equally guarded against, whenever they relate to physical, instead of abstract Agency. The tendency of the mind to connect this Relation with Personal Agency is shown in the use of alreos in the sense of

Causer, which is likewise countenanced by the Sanserit HETUKAS, and the Arabic MUSABBIB. The confusion of mind which has led to these mistakes seems, therefore, to be common to all mankind; but no Arab would say, like ourselves, 'Who was the CAUSE of it?'

§ 111. For the length to which the remarks on this important subject have extended, I feel I cannot excuse myself better than by quoting the words of Hume:—

"And what stronger instance can be produced of the surprising ignorance and weakness of the understanding, than the present? For surely, if there be any relation among objects ⁵⁶(?), which it imports to us to know perfectly, it is that of Cause and Effect. On this are founded all our reasonings concerning matter of fact or existence. By means of it alone we attain any assurance concerning objects (?) which are removed from the present testimony of our memory and senses (?). The only immediate utility of all sciences, is to teach us how to control and regulate future events by their causes. Our thoughts and inquiries are, therefore, every moment employed about this relation: yet

⁽⁵⁶⁾ Here Hume is again incorrect in supposing an *Object* can stand in the Relation of Effect, though it may in that of Cause; for it is but the *Change* produced in an object by something else which the mind conceives to stand in the relation of Cause, that constitutes the Effect.

so imperfect are the ideas which we form concerning it, that it is impossible to give any just definition of a Cause, except what is drawn from something extraneous and foreign to it ⁵⁷."

§ 112. It may assuredly be said, with the greatest truth, that metaphysical writers, so far from clearing up the difficulties of the subject, have only perplexed it; and even contributed to the notion, that the human understanding is under the influence of some mysterious principles or agency that set reason at defiance. The attempt of Brown 59 to

⁽⁵⁷⁾ Essays, Vol. II. pp. 79, 80. — The last sentence proves that Hume had not given the subject the attention it deserved; and he was avowedly ignorant that a Cause is an Abstract Relation, otherwise he would not have uttered the last phrase of the above sentence. No modern writer was a greater Realist than Hume, nor had any one a more crude or popular notion of the true value of words. His metaphysical works teem with proofs of this assertion. Take the following example, from Section XV. Part III. Vol. I. of his work On Human Nature :- "No objects are contrary to each other but existence and nonexistence." In this example we have two Abstractions; both of which are termed 'objects,' and the last of them implying privation: so that inexistence is itself an object; that is, the not being anything constitutes a supposition to be something! This is the wisdom that was set up in opposition to the absurdities of the Schoolmen: yet possibly it will continue to delight mankind much better than any thing I can say; for, as Hume himself has well remarked, -" 'tis not reason which carries the prize, but eloquence; and no man needs ever despair of gaining proselytes to the most extravagant hypothesis, who has art enough to represent it in any favourable colours."

⁽⁵⁸⁾ I have not deemed it necessary to make any remarks on Brown's Work on Cause and Effect, though he has treated the question so elaborately;

clear up this point is a remarkable proof to what an extent human ingenuity may be exerted, and how much may be said, to no purpose. In the instances I have produced, it must be seen that the understanding, though always right in practice, is invariably wrong in theory, the moment it attempts to account for its own mode of proceeding;—a fact that agrees with what Goldsmith said, with so much felicity and humour, of Burke's brother:

"Here lies honest William, whose heart was a mint,
While the owner ne'er knew half the good that was in't:
The pupil of impulse, it forc'd him along,
His conduct still right, with his argument wrong:
Still aiming at honour, yet fearing to roam;
The coachman was tipsy, the chariot drove home.
Would you ask for his merits? Alas! he had none;
What was good was spontaneous; his faults were his own."

§ 113. Such is the nature of prejudice and early bias, that I fear the reader may still be induced to

elaborately; because it is entirely founded on the misapprehension upon which I have said so much in the preceding observations; namely, the mistake that this Relation exists between the phenomena of nature. It is surprising that so many acute and able men should have fallen into this common and vulgar error;—one from which they would certainly have escaped, had they known any thing of the true nature of language. Brown's disquisitions are peculiarly marked by those characteristics for which the metaphysicians of his nation have ever been distinguished—division and subdivision. It is evident that such a process can in no way remedy a fallacy, nor convert error into truth.—See Sin James Macintosn's Dissertation on Ethical Philosophy, p. 207.

relapse into his old convictions, as often as he wishes to represent the notion of Cause and Effect to his own mind. If this should be the case, I have no other resource left for him, than to recommend him to read over again the preceding remarks, and to reflect upon them: for though it has been happily said—

"A man, convinced against his will, Is of the same opinion still,"

yet I do hope that the obvious and irrefragable proofs I have adduced with regard to this contested *Relation* will place it in its *true light* for ever.

Of Matter, Space, Time, Movement, and Force.

§ 114. The reader has been made aware that all Abstractions relate to what is General or Particular. (See §§ 33—36). The words *Space*, *Time*, *Movement*, and *Force*, are all Abstractions employed in a General Sense; and the word *Matter*. 59 is likewise a

(59) The etymology of the word Matter deserves mention; more particularly as it proves how consistent language is, in its greatest changes. We derive the word Matter from the French matière, a corruption of the Latin materia; and this, and the Greek μέτρου, both descend from the Sanserit matram. We have two corruptions of the original Sanserit term in the Saxon portion of our language; namely, mother, the feculent matter that forms in vinegar and beer; and mud, the slimy matter deposited by water. The root of matram is ma, measure, and the Sanserit termination tram is the same as the Greek τρου. The word matra, in the feminine, seems to have implied the first measure (of Space); and is, therefore, with the Hindus, equivalent

Generalization, though it relates to what is Concrete. He has seen, that whatever is general has no existence, except by the means of words. To investigate, therefore, the nature of the foregoing Terms, we must look to their use as Particular Words, and see if they have any better claim to reality. First, then, taking the Generalization to which we give the name of Matter, as it is not employed in a particular sense, we must substitute a Body in its place; and as it is inseparable from Space, we must also take a Space into consideration along with it.

Of a Body, and a Space.

§ 115. A Body is either a single atom, or it is an aggregation of many atoms. I will not here enter upon the question of infinite divisibility; but take it for granted that there is a point at which all things begin to be; and which the Greeks, with great felicity of expression, called an atom, or that which is indivisible. When, therefore, we think of a

valent to the atom of the Greeks. In the Institutes, attributed to Menu, all nature is said to be made up of Matras, which are declared to be minute or subtile. Those who think that the Latin materia is derived from Mater, a mother, and therefore means mother substance, are quite in error; for the Latin Mater and the Greek $\mu\eta\tau\eta\rho$ are both derived from the Sanserit Matri, a mother, which is radically distinct from Matram. Here we see that the corruptions of Matram and Matri are parallel in sound; and that both words have undergone similar changes in their descent. The same analogy holds through nearly all the Teutonic languages.

Body composed of one or more atoms, we are, from the very condition of such a Conception, obliged to admit that it occupies a Space as large as itself. If we have supposed a Body composed of a single atom, we may imagine another of the same kind; and having done that, we may again imagine these two little Bodies to approach one another. The instant we have had this conception, we have called into existence, in our own minds, the notion of a Space, and of a Movement of one or of both the atoms—a Time in which it was accomplished—and a Force by which they were impelled together. Now, this process, which we have merely fancied, we see take place at every moment, either in Bodies that are quite inanimate, or in such as are endowed with locomotion. Indeed, while I have been writing these few lines, I have seen my pen Move in a certain Space; I am sensible it has occupied a certain Time; and that it has been impelled by my hand with a certain Force. Now, my pen is a real thing (a body), that leaves no doubt of its existence on my mind: it is therefore termed Concrete, and is capable of being appreciated by all my senses. But when I come to inquire into the nature of its inseparable adjuncts, I am no longer certain of their separate and real existence. I feel, that to talk of a Space, I should never have had the least notion of it without the existence of my own body, or of some material thing which moved: Movement, therefore,

is essential to the notion of Space. The definition of a Body is, that it is that which prevents what is similar to itself from occupying the Space it fills; and the definition of a Space is, that it is that which can be filled by a Body of its own dimensions: they are both, therefore, united in the same conviction of the mind. But though we could have had no notion of a Space without the existence of Bodies, we must be aware that we can see many Bodies in a given Space; and that it is therefore not full, that is, not impervious. We can see these Bodies move to, and from, and cross one another; and they thus prove that the Space was not filled by unyielding Matter. The whole field or circuit of vision is, as it were, but one large image, in which we may occasionally see many smaller images (bodies) moving in various directions. These, and their movements, raise in us the conviction of a certain Space, such as we derive from sight; but that which we obtain from touch, we possess from the consciousness that we can, and do, move our hands and fingers freely at our will. That a Space may be enlarged, we learn by moving our eyes, head, or bodies: and from the conviction that we can do so in any direction, we acquire the belief that the Space might, if we could but move ourselves at pleasure, be extended without limitation.

Of a Time.

§ 116. The reader is aware that Time, being a Generalization, has no existence, except as a sound. To understand its true nature, therefore, we must examine it as a Particular Term. When we see two Bodies move with unequal velocity in the same direction, we are convinced that one reaches its destination quicker than the other. But though we saw this, if we had no language, we could have no notion of Time: but with the aid of language we have that General Notion; yet still it does not tell us how much quicker one Body can move than another. When, however, language has a word for a second, a minute, an hour, a day, a week, a month, a year, a century, &c., we are able to assign exactly the degree in which one reached a certain point before the other: for, as all these periods of time can be called one, so they may be called two, or any other number. Now, one may be halved; and that half may be subdivided, in thought, ad infinitum; BUT ONLY IN THOUGHT. When mankind began to observe and to reason, they found themselves obliged to have some certain standard for quicker and slower; and they fixed on those two great Bodies, that move in the heavens, called the sun and the moon. The apparent revolution of the first they called a day; and the complete revolution of the other, a month. By dividing the first, they had hours; and they had

weeks by doing the same for the second. The division of the hours gave them minutes; and the subdivision, seconds. Now, when they had to express the difference in the velocity between any two moving bodies, they could say it occupied so many hours, so many minutes, or so many seconds; for every one of these expressions was borrowed from the divisions of a great circle 60. Each of them. therefore, constituted a certain time; and when they said an act took up such or such a short Time, they only asserted that the difference was equal to a eertain portion of the sun's revolution, that is to say, of a day. Now, from all this it is clear, that, as a Particular Term, a Time must always mean a certain portion of the sun or moon's revolution, or the Movement of some other body; as the hands of a clock, for instance. Space and Time, therefore, though always classed together, ought to be kept quite distinct. We may speak of Matter and Space just as we would of sword and scabbard, because they are concomitant notions: but it will be evident,

⁽⁶⁰⁾ This assertion is not the less true because the Egyptians divided the circle into 360°, to agree with their earliest notion of the length of the year, that is, of the number of days in which they conceived the sun to make his annual circuit. So the Chinese divide the circle into 365¼°; which is inconvenient, though it be nearer the true length of the year. The notions of Time and Space being conjoint and coëtaneous, they naturally act and re-act upon one another in the mind: and if the orbit, which the sun was supposed to move in, suggested the number of the degrees of the circle, the division of those, on the other hand, gave the hours, and their subdivision the minutes and seconds.

that any specified Time is only the name for the Movement of a Body in a certain space. Yet such is the influence of language over our minds, that we even talk of "a space of time," as if the latter were something real, of which we could separate a portion from the general mass. Kant has been so far misled by language, as to consider Time and Space as Forms of the mind; and he terms the first an internal, and the second, an external Sense. This is the very basis of his metaphysical system. (See §§ 188, 189.) Mathematicians are equally deceived by the nature of language; and when they say that "The velocity is always proportional to the time of descent," they, unconsciously, only assert that one regulated Movement bears a certain proportion to another regulated Movement, or that the descent of a body in space bears an exact proportion, in accordance with the law of gravitation, to the Movement of the sun, of a clock, or merely of a pendulum. I do not, however, mean to say, or imply, that Time and Movement should not be distinguished by separate terms. My only object is, to show that they are fundamentally identical. When we ask, What is the time? we just do the same as if we put the question, How much has the sun moved? Practically, the term Time is indispensable in preventing ambiguity; and the evidence derived from all languages will show that Nature (§ 121) intended we should be under the delusion of believing them to be distinct notions or existences.

§ 117. When we reflect, that we can always say that any event has had a before and after, we shall be singularly struck by the foregoing conclusions. Yet let us remember, that these very words are borrowed from the notion of a Space in which we see objects so placed. If, then, there exist no such thing as Time General or Particular, how is the above succession of acts to be conceived? Here the reader, in suggesting this contradiction between Sense and Reason, has laid bare one of the most mysterious parts of nature,—one which immediately recalls our attention once more to that of Matter and Space. Were we to push these two questions to the same extreme that I have done with regard to Time, I should violate the condition upon which the whole of these observations has been ventured; namely, the objective reality of nature. Such an attempt would only convince us how delusive is the nature of every thing that arises from our sensations; and we should find the steadfast earth recede from under us, the starry host vanish from sight, " the heavens depart as a scroll that is rolled together;" and all our firmest convictions would be shaken to their basis; nor would aught remain to the reeling understanding, but the bewildering belief that nothing is certain; and that there is neither before nor after in Time or Space; neither Movement nor Force in matter or spirit; nor fulness nor void in nature;—and that all is but a vision, of

which no account can be given by either sense or REASON. It is evident, from the foregoing reasoning, that—

§ 118. A time is only another name for a Specified Movement of some Body, that has been agreed upon as a standard; and that Time, as a general Term, is a mere sound.

Of a Movement.

§ 119. The next question for consideration relates to *Movement* ⁶², which must likewise be considered in its *Particular* point of view. A Particular Movement has no more existence than that which we call General; for 'Movement' is merely an Abstract Word. To understand, therefore, what it means, we must refer to the verb to move, from which it is derived. Matter, we see, can move; but when we abstract and form the notion of Movement from it, we have a word that merely deludes us. But the verb to move, being sometimes neuter, its present participle, as such, is capable of serving as an adjective, and we can talk and think of a Moving Body of any kind. Movement, therefore—that is, the *Moving*-state—stands in the same relation to Body,

⁽⁶²⁾ I have uniformly employed the word *Movement*, instead of *Motion*; because it has the advantage of being referred to the verb to move. See § 131, on Motion.

as redness, or any quality, does: for as there is no such thing as redness, though we can talk and think of a red coat, a red cow, &c., so there is no such thing as Movement, though we can likewise talk and think of a Moving Body; such as, a Falling Star, a Flowing Stream, &c. The well-known sophism, or rather fallacy of Zeno, which is known by the name of Achilles, and by which he attempted to prove that there was no such thing as Movement, is a proof how the mind of the most acute man may be deceived, even independently of the misconceptions that arise out of language. That fallacious proposition remained undetected till very modern times; yet it appears to me, that it required no mathematical process to show its absurdity; for even the evidence of his sight might have convinced Zeno that one body can pass another; and that to pass is only the name for a particular kind of Movement;—and this must be relatively true, whether the world has a real, or an ideal existence.

Of a Force.

§ 120. The word *Force*, from its general employment in mathematical reasoning, requires particular attention. Like Space, Time, and Movement, with which it is inseparably linked, it is only a General and Abstract Term; and, as such, is a mere sound. The word has been derived from the French

language, in which it was formed from the Latin FORS (strong); and it therefore, by its origin, means strength; but, from the multitude of terms we have in our heterogeneous language, it is generally reserved for employment in the abstract sciences. As a Particular term, a Force has no more reality than the General one; and when we speak of The Force of the torrent, or, that The rock rolled down with a Force that nothing could withstand, we have not conferred any more reality on it than it possessed in its general character. When employed in mathematics, it has a purely Abstract Sense; and then expresses nothing but an ideal quantity, that becomes the subject of calculation. A quantity, to be real, must refer to something in nature; but it too frequently happens that questions purely physical are mixed up with those that are abstract, by such as have neglected to look into the nature of language; and this has been already shown (§ 14) in the case of Newton himself. With mathematicians, quantity always means something real: it is on this account that Force, Momentum, and Velocity, are always understood by them to be realities. If a mathematician took it into his head to investigate the amount of the several integral and fractional quantities of nothing, he might represent each by figures or symbols, and arrive at a right conclusion upon the data he had assumed; yet, by such a process, he would only have amused himself for the time, and his Nothing would really have stood for

Force is of very common use; and it then implies a Reality, as when we hear that a General sent a Force to the relief of a town. These observations will be sufficient to enable the reader to form a correct notion of this much misunderstood term⁶³.

- § 121. From the tenour of the foregoing remarks, it is evident that we have only two Realities, instead of five; that is to say, we have Matter and Space. But, as soon as we turn language into Abstractions, the whole five make their appearance, by the addition of Time, Movement, and Force. This is worthy of consideration; because we see that language itself helps to complete the plan of Nature, and proves itself to have been an instrument intended for the full representation and comprehension of the phenomena we witness around us. Indeed, stript of language, the intellect is a mere waste, luxuriating in barrenness, though capable of the richest products.
- (63) Berkeley, Bishop of Cloyne, asserted that there was as much proof for the reality of *Grace* as of Force. Had this most worthy man known the nature of the Abstractions against which he raised his voice so loudly, he would have spared himself the remark; as he would then have known, that all we can truly say, is, that Bodies may be made to force, or that, by supplication, God may be rendered gracious. Faith, too, when released from its Abstract Nature, implies that its possessor is faithful, that is, truly believes what he has been taught.—Minute Philosopher, Dialogue VII. §§ 1X. X.

§ 122. From what has been just said, it is evident that there is an intimate and inseparable union between these five fundamental Generalizations. Thus the Movement of Matter gives the notion of Space; and its Movement in Space, that of Time. Movement is immediately connected with the notion of Force, as implying that from which it has received its impulsion. These Generalizations are all primary, and constitute the basis of any supposition connected with nature.

Of Power.

§ 123. Power is a word in universal use; and perhaps there is not one which is oftener employed in more various senses ⁶⁴; but they are all abstract, except that for which I have exclusively reserved it in this work, namely, that of a real Agent; as when we speak of the Power (caloric) passing from the fire into the boiler of a steam-engine. In this sense, it

⁽⁶⁴⁾ Locke and Hume were both Realists, and employed the word Power without any suspicion of the ambiguous meanings it conveys. With both of them it implied Force, Energy, Efficacy, &c. But as these words are mere Abstractions, they must be referred, if we wish to know what they really import, to something that forces, is energetic, efficacious, &c.; and such a something would be found to be a Concrete or Physical Agent. Locke distinguishes Power into active and passive. Passive Power resolves itself, therefore, into something that is non-energetic, inefficacious, &c.; that is, something that is powerful, enough, to be powerless! Such are the absurdities the ablest of mankind may fall into, from ignorance of the nature of language.

unequivocally implies something real, and is no longer used as an Abstraction. In a plural sense, as in the "mechanical powers," it is employed figuratively, and the reader therefore must not be misled to think that it has in this case a Concrete sense. The mechanical powers, which are commonly considered as six, are, the lever (and balance), the pulley, the wheel-and axle, the wedge, the inclined plane, and the screw, which are contrived for the convenient and economical application of the real essence, Power; as by their means there is the least possible waste of this greatest desideratum in labour.

§ 124. Mankind, from the obscurity of the subject, and trusting merely to their senses, have considered every Body in Movement as a Force: but if we examine the matter a little closer, we must be convinced that the Body in Movement is, as it were, but the mask of that which forces. Every Body that moves must have been impelled by something. Now every one, by his own feelings, is aware, that according to the degree of Strength he possesses at the moment, and which is always varying, he is able to impel a Body with more or less velocity. It is clear, in this case, that, as his weight has not diminished, the Movement cannot simply depend upon his will and his body. We say, by the mere use of popular language, when we feel ourselves weakened after an effort, that we are exhausted. Now here

we have really said what is perfectly true, without any figure of speech; and we are deprived of that which enabled us, a few seconds before, to impel bodies in various directions. We have therefore, by our efforts, lost something, that, from long experience, we know cannot return without rest. That something, therefore, which we can employ, when we possess it, is a Reality, though quite invisible and imponderable.

To this mysterious thing, men have agreed to give the name of Power; a word originally Abstract, but which, in this case, has, by its use, lost its Abstract sense, and has been converted, as often as it is used for this purpose, into a Concrete Term. When mathematicians, therefore, calculate any Force, though their ciphers and symbols merely represent what is Abstract—namely, number and quantity,—they do really calculate the quantity of Power that is in and has been communicated by another body (living or otherwise) to the one which they imagine, for the time in movement.

§ 125. The main object of the present investigation is, to prepare the way for the consideration of the real nature of the agency which actuates the universe. Power, by itself, would be utterly unequal to the accomplishment of any effect in nature or art, if it were not directed by some intelligence. The truth of such a view will, I think, be rendered evident by the following remarks, which I printed on a former occasion.

§ 126. "It may not, however, be without its use to carry this inquiry a few steps further, and to consider the unanswerable objection that attends upon materialism, with regard to the doctrine of Power. The atheist considers that Power is inherent in matter, and inseparable from it; and that it is through its own energy that this universe, with all its wonderful variety, has arisen. Perhaps the best answer to the groundlessness of this assumption will be, to consider the nature of the Power with which the materialist endows matter; and this may be done in a few words. Power must be either something real or something ideal; that is, it must be either Concrete or Abstract. In the case of a cannon-ball, the Power passes from the gunpowder, by its explosion. into the ball. It is therefore clear, that it is capable of augmentation and diminution; and that it consequently can be transferred from one body to another. Power, therefore, it must be seen, is not an inherent and inseparable property of matter. But it may be replied, that by Power is meant nothing that is transferable, but merely an inherent Energy which is in matter, and which, by certain mechanical arrangements, enables one thing to give impulse to another. This last explanation implies that it is nothing real that is meant by Power, but

something ideal; and to this last supposition, therefore, the remainder of the argument must be directed. Power and Energy, if they do not mean something real, mean nothing at all, as they are mere abstract Terms employed by the mind for the convenience of reasoning: and the materialist, in using them without a material sense 65, has really, in this instance, changed himself into an idealist; and is so inconclusive a reasoner, as to admit of operations that stand in the Relation of Effects, and yet to deny the existence of the indispensable thing which can alone produce what are to stand in the Relation of Causes. But as there may be some materialists that do not hold the doctrine that Power is inherent in matter, though they deny the existence of an All-wise Mind, rendering it the instrument of his WILL in producing the phenomena we witness around us, the following remarks are intended as an answer to such a supposition.

§ 127. "Power being admitted to exist as a real something, it may be asked what it is that directs or guides it into the production of all the exquisite forms we see in nature? Every individual has a certain degree of Power at his command: still, experience shows us that there must be a most felicitous combination of circumstances, such as fine

⁽⁶⁵⁾ By the word *material*, it is meant that they imply something *real*, however subtile, and not an Abstraction.

organization, years of instruction, and application to a particular branch of study, before he (who is himself assumed to be a mere production of chance!) is fitted to give even an ordinary and lifeless imitation of those graceful and beautiful objects, which, according to the supposition of the atheist, has arisen fortuitously, that is, without a directing mind.

§ 128. "The power possessed by every individual is exhausted after a certain degree of effort; and sleep and repose are both necessary for its renewal. We find that a watch will not go till it is wound up, that is, till a certain degree of Power is communicated to it: by what process, therefore, is it, that the individual is, as it were, wound up, or renovated for new efforts? Repose and sleep, which are mere STATES of quiescence, could not do it: there must, consequently, have been some Agent at work, which has, so to say, recharged him with Power for the labours of the coming day. That Agent the theist calls God: the atheist terms it repose, a mere Abstract Term, and therefore devoid of reality: he has consequently assigned an effect that is without a cause, merely from his ignorance of the nature of language.

§ 129. "If it be argued, that the Power which had been exhausted by effort returns to the individual by the simple process of sleep, it will be only

necessary to bear in mind, that what has life must possess more Power than that which is inanimate: consequently, if there was a transfer of Power by the ordinary laws of nature, it would pass from that which is alive into that which is not; that is, if it tended to an equalization, it would quit, and not enter the body. But so far is this from being the case, that we find that the body receives an increase of Power during sleep. There remains, therefore, but one inference to be drawn from this fact; namely, that the Power of the sleeping body has been replenished by some agency. Vital function could not be assigned as the reason, since function itself, as an Action, must require an Actor or Agent for its production; and it could, therefore, be only the medium by which the end was effected.

§ 130. "But it may be said, that if the food was flesh, the Power was transferred from it to the individual who ate it; and though this must be true to a certain extent, as experience proves, still, at the best, it could be but the *vehicle* of the Power, and cannot do away with the necessity of some agency by which the transfer was effected, and does not account for the means by which it entered the animal from whom the flesh was taken. It may, perhaps, be replied, that he got it from the herbage on which he fed; but if so, whence did the herbage acquire it? Now all this shows, that in each step

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of the progression we must suppose a conscious and efficient, though invisible Agency, as the prime source of all these natural operations. These inexplicable difficulties of atheism have evidently beset the human mind from the earliest periods of its investigations; as will be seen by the following extracts from the Book of Job 66, one of the most sublime compositions that have come down to us from ancient times; where, speaking of the agency of the Deity, it is said:—

- 'Behold, I go forward, but he is not there; and backward, but I cannot perceive him:
- 'On the left hand, where he doth work, but I cannot behold him; he hideth himself on the right hand, that I cannot see him.'"

Of Motion.

§ 131. The word *Motion* has very often the sense of *Power*, in the way in which it is frequently used: for people speak of a body as having Motion in it, implying that it possesses at the moment something that has the means of moving it. From the many senses in which the word is used, and to prevent all ambiguity, I have invariably substituted *Movement* for it, to imply that I attach no other than an Abstract Meaning to the notion I intend to convey; and

⁽⁶⁶⁾ Chap. xxxiii. verr. 8, 9.

because it has the advantage of being referrible to the verb 'to move,' in our own language.

Of Form.

§ 132. If we consider Matter as a primary Generalization (concrete), we shall find that there are other Generalizations (abstract), which, being dependent upon it, we must consider as secondary. The first of these is Form, which, without Matter, could have had no existence. As a General Abstract Term, it has, of course, no reality; and it remains to be discovered whether it has better claims when considered as a Particular Abstraction.

§ 133. When a man without a knowledge of language, as one dumb for instance, examines any object with his fingers, he remarks, if it be of suitable dimensions, that it terminates on every side: if he uses his eyes for the same purpose, he observes the same thing, if he can get a proper view of it. When he has done this, it is perhaps supposed that he has got a notion of its Form. This, however, is not the case; for, even after all this effort, he is only aware that it is similar, or not, to some other object with which he is already acquainted. He may even have a sense of the beautiful, and be captivated by its appearance, and yet not be able to imagine why. We will suppose language to be

imparted to him: he is now able to say (but not to think), that the Form which pleased him was very beautiful. All he really can think, is, that the object—that is, the image it has made in his mind—is very beautiful; for the Form of any thing is merely in the word. Why the object pleased him so much. is one of those ultimate facts of which no account can be given: and all that can be said is, that it was so designed, that the presence of certain objects in nature (and only those in nature) are calculated to give inexpressible pleasure; and the greater, as they are more perfect, and observed with more attention; apparently, as if the sense of beauty were improved, or better awakened, by its employment. If the Form were any thing real, it would be capable of separation and duration apart from the object in which it is conceived to exist. The truth is, that the intellect receives, in the case I have supposed, a certain amount of information of the external object: if by touch, in succession; but if by sight, at once and completely. The sensations, in the first case, have to be put together by the intellect, before it can construct the whole notion of the object, supposing it to be too large to be grasped: but in the last supposition, there is an image raised at once in the mind, which is considered the same as the object felt by the fingers; because we have a conviction of the concurring and co-operating efforts of the senses, as instruments of the individual thinking

But in no way is the Form either made or self. conceived by the intellect, but is totally dependent upon language for its existence. The mention of Form suggests, in this place, the utility of drawing the reader's attention to the feeling he has of objects in his dreams. He has in them an appearance of objects, moving apparently in space; and yet he must be aware that they occupy no space. are simply sensations, and of the most mysterious kind. These will convince him, that the magnitude of the objects which he beholds when awake, does not depend upon the size of the objects themselves, but on a cause within himself; and all that the external objects can determine, is the relative size of one to the other, depending on the degree of distance at which they are placed from him. When we reflect on the wonderful combinations and the invention displayed in our dreams, we must be convinced that they are among the most mysterious phenomena of existence. The word Form has a near resemblance to Symmetry. Its delusive nature so far beguiled Kant, that, as I before said (§§ 114— 116), he considered Time and Space as Forms of the mind. These views show, that-

§ 134. Form is nothing but an Intellectual Property. See § 69.

Of Number.

§135. We become acquainted with certain words at so early an age, that we use them without ever inquiring how we came by them, or indeed ever imagining that they could have cost the least effort Number is one of the most rein their invention. markable of these. The bulk of mankind seem to think that the notion of Number is quite obvious. A little reflection will, however, convince us that this is not the fact. It is, indeed, so far from being obvious, that it is one of the grand criteria of the difference between man and the brute. No animal is sensible of number. If the fondest parent in the lower species is, unknown to her, deprived of all but one of her young, however numerous, she does not observe her loss while that one is left to her; but deprive her of that solitary remnant of her progeny, and she is for a time inconsolable. It is therefore evident, that she has no notion of Number, however self-evident the matter may seem to be to us. But, to comprehend this a little better, let us suppose one of the human species, even with the knowledge of language, to have ten or eleven eggs before him exactly similar,—he would not, without reckoning them, be aware of the loss of a single egg. Even here, then, is an approximation, though a distant one, to the ignorance of irrational creatures. The miser, with all his love of gold, must count his

ten pieces, to be sure he has not lost one. It becomes, therefore, a question, as curious as it is interesting, to inquire how mankind arrived at the knowledge of Numbers, that is, at the means of computation. Among many savage tribes, it is common to find that they cannot reckon beyond five units; and the remainder of mankind, in general, limit themselves to ten, and then combine these together for the higher Numbers: but, if I remember right, the Basques go as high as twenty, and then increase by combination. Now it is obvious, that, in these three modes, those who have respectively used them have been guided to the employment of each system by the fingers of one hand, or of both hands; and in the case of the Biscayans, they have added to these the number of their toes. If, then, we say that each finger and each toe had a separate name-which is of the highest probability in the infancy of society, as we see that the languages of savages are redundant in names for individual objects, but nearly destitute of such as express general notions—we may suppose, for instance, that the thumb of the right hand was called one; the index finger, two; and so of the others. All, then, that had to be done, was to mention the name of the particular finger that was called one, two, or three, for any number up to ten; and then, for fifteen, for instance, to say five-ten, which in time was contracted into fifteen. The rest were formed after the same analogy.—It

may be thought, that here, at least, we have no Abstract Words; and that therefore Numbers are exempt from the charge of implying nothing of themselves. This, at first sight, appears plausible; but if we remember, that, though we have employed the names of what were real, namely, the fingers, the words we have thus borrowed have lost their original import; and for their class we must not refer to their former, but their present use, which is, to express a certain Relation. That the notion of Number is altogether a distinction of the mind, must be evident from what I have already said with respect to the difference between the human race and brutes; and being merely a General Term, we must inquire into the origin of its particular notion, which is the unit. When the mind contrasts a single object with a multitude, it arrives at the conception of one. When it does the same with two, three, or more objects, it feels that the distinction amounts to two, three, or more ones. Every number, therefore, however high, only implies so many units. Hence it is evident that the notion of Number is merely relative; and that it arises, like that of other Relations, from an effort of the intellect, which could only be accomplished by the aid of language. Deprive any being of the notion of language, and you would equally deprive him of all notion of Numbers, and other Relations. He would still see objects before him as

clearly as formerly; but he would have no more conception of Number, than an untaught man has of the properties of the circle when he looks at the ring on his finger. Devoid of the knowledge of numbers, and their parent language, man would merely be the most cunning of animals: possessed, however, of these advantages, he stands like a god at the head of creation, wielding all the powers of nature for his pleasure and use, and converting the surface of the earth into a garden, stored with every convenience and contrivance that can conduce to his comfort and happiness. With it, likewise, he is able to weigh the globe he inhabits, and the other planets, in an intellectual balance; and to predict their revolutions, and the return of the seasons, without quitting his closet.

- § 136. A fancy exists among German metaphysicians, respecting an *Absolute Unity*, which has been broached in modern times by F. W. Schelling. As I feel I cannot say any thing more to the purpose than I did on a former occasion, I hope to be excused for quoting my own opinions;—an indulgence which I must claim, for a similar reason, in other places, in these pages.
- § 137. "It is worth while, however, to examine this new discovery of Schelling's a little closer. The idea of *one* is purely relative, for it arises

from the perception of the division of matter; and so we say, one, two, three parts, &c. Our ideas on this point are, therefore, perfectly clear and defined. When, however, we transfer the notion from the forms of matter—the only thing of which the senses afford us any information to that which is indefinite, namely, infinity, and which we only know by inference, it is certain we have fallen into a fallacy. We cannot in the least release ourselves from this embarrassment by tacking to it another word; such as, 'absolute,' for instance; as the original materiality and Numerical Relation still remain. Even if we could, by an effort of imagination, contemplate one single thing to the exclusion of every thing else, that thing would still be definite: and as this idea supposes the existence of no other individual thing but the one contemplated, the Relation of Number could never have presented itself to the mind; and we should only have called that one thing by such a General Term as thing, spot, figure, &c. But even admitting that we did call it one, and wished by language to show that it was released from all comparison, it would still, as the one thing contemplated, and therefore comprehended by the mind, be definite, that is, finite, and not infinite. This must prove, that the term absolute unity, as applied to the Divine Essence, is totally inapplicable. If mankind, therefore, from the effect of daily use, should receive this new term as one

perfectly applicable to the divine nature, let no one smile if some future Schelling, some scion of transcendentalism, should go one step further, and talk of an absolute half, an absolute quarter, &c. term absolute unity is, it appears to me, altogether a fallacy, as an attempt to improve upon the word unity, which we must, from the constitution of our minds, as individual beings, attribute to the divine nature, as often as we contemplate it in its agency, as the creator and ruler of all things; but neither Unity nor Absolute Unity can we, with philosophic accuracy, attribute to the Divine Essence, or Godhead, which can be represented by no sign or symbol of human invention. It must be admitted of our worthy friends the Germans, with reference to metaphysics, that "they do (to parody the words of Shakspeare) speak an infinite deal of nothing,—more than all other men in Europe 68."

(68) It becomes a question of the highest interest, to ascertain whether the Relation of Number has entered into the plan upon which the universe has been contrived. I hold back, for the present, some remarks that I have prepared on the subject. Number, in common with all the other Relations, depends for its existence on the frame of our intellect. If, therefore, we can establish the fact of a uniformity in the mode of action of Divine and human intelligence, a great advance is made in the knowledge of what seems almost beyond our finite comprehension; and a harmony is established between man and the rest of creation, that proves him to be part of a magnificent and extended plan. All Relations, we have seen, are but figments of the Intellect which enable us to reason; and it would follow, therefore, as a matter of inference, that human reason is in accordance with Divine Intelligence, differing, not in kind, but in its degree.

Of Quantity.

§ 138. The notion of number naturally leads to that of Quantity, of which it is the higher Generalization, because it includes measure as well as number. The word Quantity, being derived from the Latin QUANTUS, meaning how much? and how many? signifies, how-much-ness, and how-many-ness. The English language has this degree of definiteness over several others, that it can distinguish between how much, and how many, as applied to both measure and number. The French language, for instance, has but the one word, combien, for both purposes. This affords an example of the great disadvantage attending the employment of comprehensive forms of expression. Every specific question should be discussed with specific terms; otherwise, a reason that would apply only to one particular view may incautiously be extended to that with which it has no relation. Thus, as I have said before, in § 107, the Hindus, by comprehending both Cause and Effect, as well as Source and Product, under the same term, have been led into even greater mistakes than the metaphysicians of Europe, upon the points connected with these topics 67.

⁽⁶⁷⁾ Sec Note (B), §§ 5, 10.

Of Weight.

§ 139. When we take up a Body in our hands, we feel that it would fall to the ground, if left to self. But we can find others—a feather, or a soapbubble, for instance—that, on the contrary, will float of themselves in the air. When we have observed this, we express the fact, by saying, that the first was heavy, and the two last light. But as, according to the genius of language, we have a class of words which we call abstract, that we employ when we reason, we convert this word Heavy into Heaviness, to agree with the others. When we are desirous of knowing how heavy any Body is, we weigh it against another; and then pronounce that it is of the same, greater, or less Weight than that Body. Still, there is no such thing as absolute weight; and all we have learnt, by weighing it, is, that it is of a certain relative weight to another body. When we do not speak of Weight in the abstract, we call it a Weight; and then it always refers to that of some particular object. Weight is only gravitation viewed and considered in a special light. The remarks which follow, on Magnitude, apply with equal force to Weight.

Of Magnitude.

§ 140. When we contemplate a Body, we observe that it has, among other properties, that of being larger or smaller than others with which we contrast it. To the notion that arises in our minds after such a comparison, we give the name of Magnitude (great-state). But such a Relation, it is clear, cannot exist in the object itself, but in the mind contemplating it. Every object is only large or small relatively to some other; and whatever is relative implies a mind that is capable of inferring the Relation. When we say, therefore, that any object has a certain size, we can do no more than point out or produce another thing of the same size. Consequently, there is no such thing as Absolute Magnitude. When, therefore, we ask what is the particular Magnitude or size of any object, we only demand the name of the Body to which it is equal; be it our thumb (an inch), our foot, &c. Should it exceed or fall short of these respectively, we have only to multiply or divide them, as the case may require. It is obvious, that the question of Magnitude is identical with that of Matter and Space; and perhaps it may help to convince the reader how inscrutible these questions are, and which have, in truth, puzzled philosophers ever since the first dawn of inquiry. Such investigations, however, have their use; as they prove that everything in nature is RELATIVE, and nothing ABSOLUTE. This inexplicable result, joined to what I have said with regard to Infinity and Time, will make the reflecting mind fall back with wonder and astonishment

at the incomprehensible nature of the phenomena which we behold around us ⁶⁹: so true is the profound and beautiful sentiment of Pascal; that—Reason confounds the dogmatist, and Nature the sceptic.

Of Proportion.

§ 141. If we look at any object with attention, we shall observe, if it have parts, that these parts can be compared with one another; and each of these, besides being capable of being contrasted with the others, can likewise be compared with the entire object itself. When we have so done, we can say it has such and such Proportions. If it does not contain separate parts or members, we are then confined to the examination of its diameter in different directions; and from this effort we draw our inference, as to its Proportions. In all these processes of the intellect, we have clearly only arrived at an inference; and we thus feel, that the notion of Proportion, like that of Form and other properties, is truly a creation of the mind, resulting from the employment of language.

⁽⁶⁹⁾ The incomprehensible nature of these topics to Human Reason is further pointed out in the Appendix, Note (D).

OF SCIENTIFIC REASONING.

§ 142. The utmost we can learn from the pure sciences is, the fact of the perfect agreement of their results with the actual phenomena of nature. They ean, however, teach us nothing as to the origin or the rationale of things: still, the demonstrations of Science cannot but raise our minds to the conviction of a wondrous Intelligence, that must be the regulating principle of all that we behold around us. That every thing obeys laws established by perfect wisdom, without any deviation, is surely as edifying a conclusion as it is possible for humanity to arrive at; and cannot but make us feel the dignity of our own nature, at the very moment we are humbled by the contrast that we must unconsciously draw between ourselves and the Omnipotent Being to whom we are indebted for existence. To be fitted for the contemplation of the spectacle of the universe is surely to have a high privilege, and an important station in nature.

Of the Laws of Nature.

§ 143. It was not long, even in the infancy of society, before mankind observed that certain results always occurred under similar circumstances. Thus, the fall of a stone, or any other heavy body, to the ground, was soon taken as a matter of course: such, also, was the case with the ascent of flame and smoke. is unnecessary to repeat here other familiar instances in which we always expect a recurrence of what we have observed before. When such facts began to be reasoned upon, they impressed the mind with the conviction that they had their undeviating uniformity from some presiding influence; and, as the word Nature had become personified as the great Agent of the universe, every result of the kind was said to take place by a Law she had established: hence arose the expression so commonly used, "the Laws of Nature." We must see from this, that it is purely figurative. But, though very convenient for general purposes, it cannot be denied that it has a great tendency to mislead those who employ it, and to make them think that every thing jumps here, and jumps there, in consequence of a "sic volo," or injunction, given to them, at creation, by Nature. The agents that keep the universe in harmonious action being invisible, such phrases help to take away all uncertainty; and mankind repose upon them with a security, that will last as long as their ignorance of

the real nature of things exists: for the mind of man has as great a horror of uncertainty, as, philosophers tell us, Nature has of a *vacuum*.

Of Attraction.

§ 144. The word Attraction, by its derivation, means the act of drawing to; but its employment as an Agent can only tend to mislead, and is not useful, even theoretically. It is one of those remarkable instances of the effect that language has, in misleading the minds of even the acutest and most cautious of men. But scientific and natural philosophers will find that they are beguiled by language as much as the rest of mankind; and that they are then as much under the dominion of fancy, as those who are not supposed to be, like themselves, lovers of calculation and matters of fact.

§ 145. No movement, it will be admitted, can be evident to us, without it is perceived by some one of our Senses. Matter is consequently necessary to the existence of those forms which we can perceive; for whatever form is of sufficient magnitude and solidity to be cognisable by our touch, and is still not tangible, we naturally and truly pronounce to be a mere vision, and to have no outward existence. But while we are thus sensible that matter is indispensably requisite to movement, we must be

equally certain that that which is void of life and thought can in no way move itself. If we say it is done by Attraction, we then assert that bodies mutually attract one another, and so join together spontaneously. This may be a very easy, though not a very profound way of accounting for the junction and approximation of bodies. If a juggler says "va presto," and seems to make anything disappear by word of command, he may deceive children and ignorant people; but those who are better informed only admire the dexterity he had displayed in the feat. That a philosopher should talk of Attraction as a reality, and attribute all the phenomena in nature to it, is drawing as strongly on the credulity of mankind in general, as the juggler does upon the simplicity of his company. It is in vain that the philosopher says in his own defence, that he means, by such an expression, only to assert a general fact, namely, the tendency of one body to another. If he mean no more, he should remember, that he who would be the very first to cavil at any term that was contrary to the technical phraseology he is in the habit of employing, should be the last to make use of an expression that contains in itself an assumption that he cannot defend. But he will not make the admission, till he is hard pressed; and then he will instantly relapse into his real and habitual conception, and talk of attractive and repulsive forces as indubitable facts; thus showing that he has no other

opinion on the subject than the one he has been forced for the moment to abandon; nor could it be otherwise, if thought and words have any conformity: and be it likewise remembered, that these same Forces are the mere chimeras of his own imagination. See §§ 120—122.

§ 146. It is easy to understand how one body may attract another; for a boatman, with his hook, may be seen to attract, or draw to himself, another boat: but how one atom, or one body, can of itself attract another, seems utterly incomprehensible to me. I feel it is only battering down a wall of pasteboard, to make these remarks; for not only do natural philosophers feel that Attraction is one of those points which they must surrender up the moment it is vigorously attacked, and which they only preserve for want of a better definition; but the reader is aware that this famous Agent is nothing more than an Abstraction, which has been converted into a reality by the mere course of language; and therefore has no existence, except as a sound: it consequently stands in the unhappy situation of the non causa pro causa of logicians.

Of Attractive and Repulsive Forces.

§ 147. Natural philosophers, having satisfied themselves of the existence of Attraction, have

founded upon this belief the doctrine of Attractive and Repulsive Forces, as real powers. We have seen, that the notion of Force is purely Abstract, and likewise General; and that therefore it has no existence, except by the medium of language. have further seen, that if we are to understand any thing by the term, we must refer it to something that forces; and, in every case, it can only be effected through the medium of a real essence, which I call by the name of POWER (§§ 123-130), that may be made to exhibit its energy by the means of any body that it can move. But mathematicians having taken the word Force as a reality, have constructed their arguments upon the strength of the supposition; and it must be admitted, that they labour under many chances of being deluded, when they theorize without a due knowledge of the nature of language. All that is statical and dynamical, in nature, being strictly in accordance with science, it is not surprising that they find but little difficulty in anticipating most of the obvious consequences resulting from this important truth; but then it is attended by one great disadvantage, namely, that, as in the case I have supposed about nothing (§ 120), they may assume any theory, and prove it to themselves and others with the usual parade of the most rigorous demonstration. Thus, according to the undulatory theory of light of Huygens, they have only to assume the propulsion of waves, agreeably to certain

laws, and they may, without difficulty, satisfy themselves that it is right: but if they laid aside their symbols, and asked themselves how waves could cross each other in the same instant of time, above, below, on every side, and at all angles, without disturbing, confusing, or obliterating their own effects, they might be brought to feel that something more than nicety of observation and dexterity in wielding the calculus are necessary in such investigations:—and the very same objection lies against the radial theory of Newton. Some other hypothesis, therefore, must be sought for, to account for the propagation of light: and, even were either rays or waves free from the difficulties I have pointed out, it would be still necessary to show what it is that propels either the one or the other with such astonishing velocity. A theory is not worth any thing, that merely amuses us with words, or assumes something that requires as much explanation as that which it was meant to expound. The doctrine of Forces can only be admitted in questions of pure mathematics, where the whole of the topics under calculation are all equally abstract; but when it is pretended that the cohesion of bodies, for instance, can be explained by the means of Attractive and Repulsive Forces, it is clear that nothing but error and misconception can be the consequence: for it is only to assume that the Attractive Force (an Abstraction) is equal to a certain amount, and that the

Repulsive Force (an Abstraction) is something less, which therefore allows the Attractive Force to be the stronger of the two; and so all things in nature are very ingeniously, firmly, and compactly held together by this Attractive Abstraction, when, of course, the whole finishes with Q. E. D., and every one is satisfied. In making these remarks, I have not the most remote intention of undervaluing the labours of mathematicians; which, in all that regards pure science, have been of inestimable value to mankind, and really constitute, what may, without exaggeration, be called the glory of the Human Intellect 70. My only object is, to point out, that a knowledge of the nature of words is an important, nay, an indispensable branch of their calling; and without which they will, as often as they begin to theorize, fall into the most absurd mistakes. They should, therefore, be on their guard, whenever they are considering a question of physical science; and remember, that their symbols either represent what is

⁽¹⁰⁾ It is worthy of remark, that the germs of, nearly, every fundamental notion in science is be found among the Hindus, apparently unborrowed; but there seems to exist no trace of that branch of mathematics called 'conic sections.' These immortal investigations of the properties of the sections of the cone, to which modern Astronomy is so much indebted for its most brilliant discoveries, is therefore entirely due to Greek genius; and show what it could effect in abstract science, when a rational subject was presented for its employment. See § 169.

real, or something that is purely abstract⁷¹, and, therefore unreal.

Of Affinity.

§ 148. The word Affinity is here introduced rather with a view of drawing the reader's attention to the fact that it is not overlooked, than for the purpose of any particular elucidation. By its etymology, it means nearness; but this sense is merely figurative as to its scientific use, where it marks the fitness of one substance to combine with another by known laws. Though employed much in the same way as the word Attraction, it does not assume so much as that contested term; because, being used in a neuter sense, it lays no claim to being an Agent in nature, but is felt to be, as it ought to be considered, rather as a result. When, however, Kirwan and some succeeding writers on chemistry subdivide Affinity into various kinds, every one must feel that they have merely multiplied terms to an unnecessary extent, and that they have only obscured a subject sufficiently mysterious. We are told that there are the following kinds of affinity:-

⁽⁷¹⁾ In Note (E) of the Appendix, it will be seen that Mr. Davies Gilbert has cleared up the difficulties that involved in mystery the nature of Negative and Imaginary Quantities; but he does not seem to have been aware of the paralogisms attendant upon the ordinary use of Abstractions in mathematical and other reasoning.

Affinity, Compound.
.... Divellent.
.... Double.
.... Intermediate.
.... Quiescent.
.... Reciprocal.
.... Simple.

. Vital.

§ 149. The reader will be quite convinced, by the above specimen, that it is unnecessary to pursue the subject any farther.

Of the Vis Inertiæ, &c.

§ 150. Newton considered that there is a "passive principle, by which bodies persist in their motion or rest in proportion to the force impressing it, and resist as much as they are resisted;" to which he gave the name Vis Inertiæ, or the power of resistance. Had this question not related to mechanics, but to the abstract expression of the laws of the phenomena of nature, we might have understood that he meant by this "passive principle" nothing more, than that all bodies continue to move as long as they are impelled, and that action and re-action are equal and opposite. If we do not take the expression in this last sense, we must suppose that he used the terms "Motion," "Rest," and "Force," with a Concrete Meaning; and then we shall be reduced to the

further dilemma of inferring that his "Passive Principle" is a real Agent in nature. Now, supposing, for a moment, that this was what he meant, it is not very easy to comprehend how an Agent, "by which bodies resist as much as they are resisted," could be passive. The fact is, that the difficulty that arises in our minds on this occasion is that which must ever result from the use of Abstract Language with regard to fundamental notions. By not remembering that Motion, Rest, Force, and similar words, are purely Abstract Terms, we cannot but argue in a circle; and end in amusing ourselves, at the best, with phrases that, when examined, are found to be nothing to the purpose, or to beg the whole question. Science is, undoubtedly, an abstract process; and for the *mathematical solution* of the laws of motion, various things must be assumed, by which mathematicians arrive at a true expression of the desired answer; but in so doing, they ought never to forget the nature of the words or the symbols they have employed in the process of reasoning and calculation; and both operations will be found to have a nearer resemblance to one another than is generally supposed. Let us, in opposition to Inertiæ (inertness), suppose that all movement is propagated solely by means of the real essence, Power: we shall then have something that stands in the relation of cause to the effect, and be certain that bodies cannot move without it; that they are therefore perfectly passive and indifferent; merely changing place when impelled by it, and continuing in movement, resistance, or place, only as long as they are under its influence. We shall also see that bodies must be always *inert* of their own nature: and we consequently get rid of this extra Agent, that is both Active and Passive at the same moment, and which has been introduced into the mechanism of nature under the delusive influence of language⁷².

§ 151. By a notion similar to that which led Newton to the employment of the term *Vis Inertiæ*, mathematicians speak of the following kinds of Force:

Vis Activa.

... Passiva.

... Absoluta.

. . . Accelatrix.

... Impressa.

. . . Insita:

... Centripeta.

 \dots Motrix.

⁽⁷²⁾ Since writing these remarks, I find that Sir John Herschel has explained away the agency of the Vis Inertiæ, and, consequently, its reality. (See his able Discourse on Natural Philosophy, § 234.) The object of my remarks being to show the delusive influence of language over the minds of the soundest reasoners, it still remains a question in what sense Newton himself understood the term. I have already shown, in § 14, that language led him into error with regard to Attractive and Repulsive Forces.

§ 152. To the foregoing must be added the Vis Viva and the Vis Mortua of Leibnitz. Such terms may be useful, and can lead to no misconception as long as the true nature of language is not forgotten; but it is hardly possible that they can be employed by mathematicians, through the tendency to Realism that always exists in the mind of every man, without being mistaken for real entities.

Of the Vis Vitæ, &c.

§ 153. The practisers of the healing art must have been among the earliest votaries, if not the pioneers, of science. The pugnacious tendencies of mankind were continually calling into use whatever skill they had acquired; and, if we may judge from the accurate specimen afforded us of the practice of semi-savage life in the Pacific Ocean⁷³, human ingenuity arrives at considerable perfection in conditions of society that would scarcely promise such advancement. The followers of the medical art must have been strongly impressed with the secret agency of nature in effecting those surprising cures and restoration of parts, which came from time to time under their observation. From the days of Hippocrates to the present, physicians have

⁽⁷³⁾ See Mariner's very interesting account of the Friendly Isles.

employed various terms that express their conviction of some secret force operating in animal bodies. Of these, the following are the most common:—

Vis Vitæ.

... Mortua.

... Medicatrix Natura.

... Conservatrix.

... Plastica.

... Nervosa.

... Insita.

§ 154. Other names have been assigned, such as Archæa by Van Helmont, and Impetum Faciens by Boerhaave. Perhaps to all these terms we must attribute an Abstract, rather than a Concrete Sense; and they are no other than so many attempts to hide ignorance of causes under fictitious names, which might serve as props to support the understanding from betraying its weakness, to itself and to others.

§ 155. Having said so much against the abuses attendant upon the employment of Abstract Language, without we preserve a perpetual consciousness of its real nature, I think the present is a favourable opportunity for pointing out its indispensable utility as the sole means of classification and reasoning. All diseases being merely *States* of the body, it follows, that without the help of Abstrac-

tions they could never have been the object of reflection: for as they have no other existence than as sounds, they would be without a designation; and consequently, never being the subject of thought, we should be only able to say that one person was sick or affected just like such another person, or that he was feverish, gouty, coughed, &c. Now, however, we can say, that he has a Fever (tertian, quartan, or any other); that he has the Gout, a Cough, &c. The obvious inference to be derived from this observation is, that though diseases are classed under separate heads, they must really be as different from one another, even when called by the same name as the bodies are in which they occur.

OF THE MIND.

§ 156. The investigation of what is called "The Mind" will be sufficient, of itself, to show that the consideration of the nature of words is no contemptible pursuit, but one really deserving of the closest application of our faculties. THE MIND is one of those comprehensive and Abstract Generalities which we are momentarily in the habit of employing, till at last we believe them to be perfectly real things, of which it would be folly to doubt. A little reflection will however convince us, that, at least in the manner in which we make use of these expressions, we are under a great misconception. To feel the full force of this remark, we must consider what are the constituent parts of The Mind, and what likewise is their nature. we accurately analyse them, we must see that they consist, Reason being excepted, merely in what are called the 'Faculties,' which consequently are mere Abstractions; and to them, therefore, I now proceed to draw the reader's attention, after a few remarks upon Sensation, Consciousness, and Intelligence.

Of Sensation, Consciousness, and Intelligence.

§ 157. No right consideration of the Mind can be undertaken without a due comprehension of these three terms.

§ 158. A zoöphyte, and most animals just born, cannot be said to possess Consciousness; and it is not for some days after the birth of an infant that it shows symptoms of this state; and a very much longer period elapses before it exhibits signs of Intelligence. So, when any one is asleep, we discover that even Sensation is almost dormant, and that, when suddenly roused, he is simply conscious; but it is not until he is broad awake that he can give an intelligible answer, though he is perfectly Conscious of the presence of the person who may be interrogating him. All these facts point out, that Sensation, Consciousness, and Intelligence are totally distinct States; and that the abode of each must be sought for in separate organs. Physiology has decisively shown, that it is to the nerves we must look as the seat of Sensation; and that the information they obtain is referred at once to the brain, which is the common centre from which they radiate, mediately, or immediately. It is the brain, therefore, or a part of its contents, that is conscious of what the nerves have experienced: and if the impressions are not of a transitory nature, the

Consciousness of such sensations is then termed Memory. Our feelings, therefore, are recorded in the brain, as in a memorandum-book; but we might as well expect that such a volume could make use of its contents, as that the brain should be able to employ its own materials, that is, that what is Conscious should supply the place of that which is Intelligent. If Sensation depend on the nervous system, and Consciousness on some portion of the brain, we must equally believe that the Intelligence, which, with the aid of Reason, is to compare, classify, and decide upon the facts at its disposal, must have its own peculiar organ. What portion of the contents of the scull is thus pre-eminently distinguished over the whole system, it is not my intention to discuss at present; but it is evident that it must be as superior to the portion of the brain that is Conscious, as this is to the nerves, and as these, again, are to the muscles and coarser parts of the body. It is this unknown organ, so highly endowed, and constituting the thinking, reflecting Agent, resulting from the combination of soul with matter, duly organized, that I call, in these pages, by the name of Intellect. But as the brain is the general term for the contents of the scull, what I have just said must be so far modified as not to mislead any one; and that portion of its contents which is conscious ought, for the sake of clearness of conception, to be called by some word which

would clearly express its office; and for this reason I assign it the name of Sensorium.

§ 159. It must not, however, be supposed, for a moment, that though the Intellect, Sensorium, and Nerves are separate and distinct organs, that they are independent of one another. They are to be considered as forming a triad, in which every one is essential to the operation of the other; nor can Intelligence, on any occasion, dispense with feeling, when it pronounces judgment on the facts presented to it by Consciousness, except on an abstract subject. For instance, when we say that the whole is equal to all its parts, Feeling is in abeyance, though the notion of whole and parts was originally obtained through its means. The Intellect, without the aid of the materials afforded by the Sensorium, and derived from the Nerves, would be as useless as a mill that is without grain and a hopper. It is the union, therefore, of Intellect, Sensorium, and Nerves that constitute the mysterious Agent called Self, and which is consequently intelligent, conscious, and feeling, and, when under the guidance of Reason, is also rational. This triple being resembles, externally, a bulbous root with its dependent fibres; the other parts of the body being subsidiary adjuncts, intended for effecting nutrition and action, under the will of the Intellect, the calls of the Appetites, and likewise, but too often, under the unbridled

dictates of the Passions. Are the Feelings, then, too acute, the Appetites too craving, and the Passions too violent, the Intellect will be troubled in its operations; and "the still small voice of Reason" being unheard, the individual is, for the time, under what is termed mental derangement, even though he is not what is actually called mad. But though our Feelings do occasionally betray us into excesses that are injurious, in their consequences, to ourselves and others, we must never forget, that no decision can take place, with the exception just alluded to, that is not effected under their influence—a fact of the utmost consequence, in the regulation of our conduct.

Of the Faculties.

§ 160. Of all the Faculties of the Mind, there being none so important as the *Understanding*, I commence with it. The first great delusion we are under, is in supposing that the word Understanding represents any thing whatsoever. We, that is, our thinking selves, may *understand* what we hear or see; but when we employ the Abstract word Understanding for some part of ourselves, we do so clearly by a fallacy. When we *understand* anything, we necessarily *feel*, are conscious, and intelligent: and were I to analyse the term Understanding according to the usual mode in these cases, I would consequently say, that it is compounded of Feeling,

Consciousness, and Intelligence. For if I analyse one Abstraction, I shall most likely do it by the help of others; but, in reality, there is neither Understanding, Feeling, Consciousness, nor Intelligence; and, instead of these, we must remember that it is the union of soul with matter, which, being organized into human frames, understands, feels, is conscious, and intelligent. This, I think, is sufficiently obvious; and I now proceed to say the same of some other of the most remarkable of our Faculties.

§ 161. We talk of the Faculties we call Memory, Imagination, Judgment, Will, Attention, Reflection, &e.; but it is obvious we must do the same with these Abstractions as with the Understanding, and remember, that all we can truly say is, that we, our individual selves, can remember, imagine, judge, will, attend, reflect, &c. and nothing more. Consequently, the supposition of Faculties, upon which we so often draw, is a mere conventional form of speech; and, however expedient or inevitable this course is, we ought never to forget its real nature when we investigate such matters, otherwise we shall only delude ourselves, and mislead others. We call these Abstractions, 'Faculties,' and 'Powers,' but it is only by a sort of figure of speech; and yet men go on gravely discussing the nature of these Faculties as realities of which there can be no doubt. We

likewise forget that the words Faculty and Power are both Abstract Terms.

§ 162. The Faculties, if we except Reason, constituting the whole of what is called The Mind, we must see that the very thing, of which we were as sure as of our own bodies, resolves itself into the mere operations of what we may appropriately call the Intellectual Agent, which, in the sense that results from the preceding views, means nothing more than the Thinking Individual, cognisant of exterior nature through the organs of sense. It is in short, as I have before said, the Mysterious Being that results from the equally mysterious combination of soul with matter. Language, though the essential and indispensable instrument of thought, ought never to be mistaken for that which thinks, that is to say, for the Intellect; yet language is as indispensable to it as wheels are to a carriage; and were a Shakspeare to be utterly deprived of the memory of words, he would not merely be unable to think, but be simply a cunning animal. From which we must feel, that speech was as much designed as an aid to the Intellect, as the hands and legs are to the body, or as the trunk is to the elephant; and indeed is actually so identified with the Intellect, as to be mistaken for what we call 'The Mind.

Of Reason.

§ 163. Of all the divisions into which we separate 'The Mind,' Reason is the only one which is not a misconception arising from the delusive nature of language. It is not a Faculty, but a real Agent, aiding and assisting the Intellect of man in all its varied operations. Upon what grounds I make this assertion, must be deferred for the present; as it would not merely involve me in a disquisition of a length disproportioned to the other questions which I have selected for discussion, but because it will appear more appropriately hereafter, in connexion with that to which it has never been suspected to be related: and all I have to say will. consequently, then be better understood than it could be in this place. In so doing, I do not ask the reader for any admission, but merely that he will suspend his judgment till I can produce all the evidence necessary to leave no doubt of the truth on his mind; and he will then see why Instinct never errs; while Reason, of which we are so proud, is ever in danger of going astray.

Of Insanity.

§ 164. The preceding views demonstrate that what we call *The Mind* is merely a collective Term for the operations of the Intellect. When we

speak therefore of Insanity of Mind, we can only do so by a figure of speech; and we must consequently look for the cause of mental alienation (in the absence of our knowledge of the abode of the Intellect) to the state of the brain and nervous system. question of moral insanity, that is, of disease of that separate part of us which is commonly called 'The Mind, has long been agitated among medical reasoners; but had just notions of language been entertained, the subject could never have been mooted. If, therefore, no other advantage could be derived from the preceding remarks, than the placing this important point in its true light, the effort would certainly have been worth the trouble. Insanity, it is evident, must always be a physical disease; for it would be an absurdity to suppose that the Soul could be subject to derangement, disease, or death.

Of Ideas.

§ 165. Perhaps it will be impossible to find, in the whole range of our language, any word that has been brought into such general use as *Idea*; and which, if we examine it closely, is so little entitled to the distinction. So much, indeed, has this word obtained a general currency, that it requires some hardihood to call its legitimacy in question. What we term an *Idea*⁷⁴, being derived from a Greek

word implying $I see^{75}$, signifies properly a sight; but is restricted, by convention, to mean a Form or *Image*, not perceived by the senses, but supposed to be conceived by the mind. It is generally assumed that Ideas are, as it were, the pabulum of our thoughts; but if we closely examine this point, we shall find it to be an error, and that, though the belief in Ideas has prevailed over that of Species ever since the time of Des Cartes, we have only substituted one illegitimate notion for another. When we reason, we do but employ Words; and if we seem to call up the Images or Perceptions of the things they represent, it is merely by that inseparable conjunction that exists between the objects of our thoughts, and to which the term Association of Ideas is applied (§ 168). The same result, however, will take place if we hear any word pronounced in a particular way, to which our attention had been once strongly drawn; for, on hearing it again, we shall, in all probability, call up the image of the person, and even the place where we first heard it. Such things must have been observed by every one. How often does it happen, that we cannot bring to mind, not the Idea, but the exact Word we feel is required by the nature of what we have said, and of what we are about to say? Our discourse, in these respects, being like a piece of

mosaic, or a dissected map, we know we want something, and we are quite aware what form it should have, to fill up the gap in what we are constructing; yet there can be no Idea, image, or form previously in our minds, if what we require should be an Abstract Term: but, does it refer to something we have seen, touched, &c., then we call up the image, in our endeavour to find the word we want. If any one will closely attend to the operations of his own mind, he will find this to be the fact. When we argue about something that we have never seen ourselves, or had pourtrayed to us by a pictorial or other representation, we can talk about it just as clearly and as cogently as if we spoke from personal knowledge; yet, in so doing, we do not call up or form any image on the subject 76. If, for instance, I talk of Mango Capac, the divine founder of the Peruvian monarchy, I have not merely no image of him in my mind, but, as I never remember to have seen any representation of him produced by the imagination of another, I do so without any other aid than that of Words. Again, if I tell the reader that the Chinese employ, to a great extent, a hard substance, of a granular formation, in their cookery, and that it is of so much consequence to this singular people, that it is to be seen piled up, in large stacks, on the banks of their canals and rivers, ready

for transportation throughout the country, and that the want of it would cause an immediate commotion in man, woman, and child, from one end of the empire to the other, I am sure he is able to comprehend all I have said, though his imagination has not, perhaps, in this description, called up the Idea of the thing I mean⁷⁷. As a further proof that it is only with words we reason, let the reader remember, that eight out of the nine parts of speech, which we employ in reasoning, cannot, by any possible means, be referred to Ideas. If children and people of vivid imaginations do, at times, couple the images of things with the tenour of the discourses (not the single words) that they hear, this is no proof that each word represents an Idea. Very often it arises merely, as I before said, from the Association of Ideas, but generally from a more than usual interest in what they are listening to; and it is natural, on such an occasion, that they should substitute some person, place, or other object, which had previously come under their cognisance, for what they hear described; but this cannot be the case in discourses that relate to moral and abstract subjects; for what Picture or Image can we call up, to identify with such words as Principle and Conduct; or Profundity, Research, Glory, &c.? To reason,

^{(&}quot;) Those whose imagination may not have helped them to the solution of what is here intended, will find it in Note (G) of the Appendix.

therefore, is to employ language according to the frame of our intellect, just as to walk is to employ our legs according to the action for which they were formed. There can, consequently, be no reasoning without language, as there can be no walking without legs, nor flying without wings. The applying, therefore, the term Idea to any *single* word is a mere mental delusion, founded upon custom, and derived from the misconception of metaphysicians.

§ 166. Having thus shown that we cannot call a word that stands for a Perception, that is for something Concrete, an Idea, it may be questioned how far it is merely useful, as the representative of the remaining class of words called Conceptions. By the very nature of the word Idea it implies something that is single: it cannot, therefore, represent those Inferences, Phrases, Opinions, &c. already alluded to (§§ 3 and 30) which are really or virtually compounded of many single words; yet we continually employ it for such purposes. So we also say, 'Such is my Idea,' &c., though we mean, on such occasions, 'my opinion, my notion, my sentiments,' &c. We must see, therefore, that Idea is one of those words that are introduced into language, from time to time, without the least necessity for so doing; and, that by its rejection we should be really benefitted: for whatever tends to make language vague,

not merely unfits it for its legitimate use, but is really injurious to every process of reasoning. As a word that seemed so happily to stand as a general representative for Concrete and Abstract terms, its use might have been tolerated in philosophical investigations; but as we have seen that it is inadmissible as the representative of Perceptions, it may be justly doubted whether it would not be better if it were altogether discarded from philosophical language, as merely tending to multiply, without any adequate advantage, the terms which are used in reasoning. In these pages it has been only employed for the purpose of refutation or of quotation, as not merely useless, but tending to create false inferences; for besides being a redundancy, it has not, like Perception and Conception, the advantage of being connected with a verb in our language. Few reasoners can be more clear than Locke, as far as regards the making his sentiments understood; and yet, by calling the words we employ to represent what we have *conceived* by our minds, as well as what we have perceived with our senses, by the term Ideas, he has diminished much of the perspicuity that he might have introduced into his work. All true knowledge consists in individualization and exact representation; and many false and incorrect notions pass without detection by the use of General, and therefore vague, Words. We ought to avoid the needless multiplication of Terms: to which our

language is but too prone, owing to the various sources from which it is derived: multiplication of terms being apt to generate the notion of multiplicity of things,—a baneful tendency in philosophy. The word Conception, however, has not only a beauty and force from being connected with the verb to 'Conceive,' but is, moreover, of particular value, as being applicable to all the Conceptions of our minds, as well as to our combinations of words Thus we can apply it to the inveninto phrases. tions of the poet, the artist, the musical composer, and to those of the mechanic,—properties that render it a term of peculiar aptitude and felicity for every thing connected with what can be conceived by the intellect. But if we contrast the word Idea with Perception and Conception, we must at once discover that it is not the true representative of either the one or the other: for, if it be employed for the first, we must see that Image is a more correct term; and if for the last, that is to say, for Conception, we must be equally convinced, that a word, that in its own language meant an Image or Form, cannot, without a certainty of error, be applied to mere sounds, that have no more existence than so much breath; and that its employment in a double character can only produce confusion of thought, and, consequently, fallacy of judgment: for I must once more remind the reader, that an Idea must either be the equivalent of a Perception, or a Conception;

and that these two words are merely Abstractions, that could have no sense, if we did not refer them, respectively, to the only assertion any of us can truly make; namely, I PERCEIVE *Things*, and I CONCEIVE *States*.

Of Abstract Ideas.

§ 167. I have said so much on the real nature of Abstract Ideas in § 6, that I feel it is only necessary to allude to them here, to show that they have not been forgotten in the systematic view which I have proposed to myself in the present remarks. If Ideas really represent nothing, and are merely names for the sounds or symbols we call Conceptions, it is obvious that the abstracting of these Abstractions is a mere delusion of language. For Abstract Ideas, therefore, we ought invariably to substitute the expressions, Abstract Terms, Abstract Words, or Abstractions.

Of the Association of Ideas.

§ 168. From the preceding observations, it is evident that we cannot, with any propriety, speak of the Association of Ideas; but we may, with greater justice, do so of our Associated Recollections. No one event or object being capable of being observed alone, but always in conjunction with

others, it naturally follows, that we cannot think of any one of them without its being accompanied by those which were associated with it from the connexion of time and place, or of reflection. For instance, I rise from my chair, and look out of the window, on a beautiful meadow bespangled with countless wild flowers: the sky is serenely beautiful -not a cloud is to be seen: the air conveys along, with a delightful coolness, the most agreeable fragrance from the rich vegetation over which it has passed. Beneath the umbrageous foliage of a horse-chesnut, I behold some cows, that have sought shelter, in a shallow pool at its roots, from the ardent heat of the sun: they are engaged in chewing the cud, and whisking their tails to keep off the tormenting attacks of innumerable winged-insects that are hovering around them. I see the milkmaid approaching, with a pail in one hand, and a stool and tether in the other. During all this scene, my ears are delighted with the songs of various birds, that express the fulness of their joy of existence in a thousand varied notes: my palate is gratified at this moment by the flavour of the fruit I am eating: my fingers, too, touch the soft and dimpled cheek of a child beautiful as a cherub; --- and these objects occupy all my senses at once, and give rise to the most pleasing reflections. My bosom, too, is in harmony, by its own sensations, with the picture I have sketched so imperfectly; and all my

thoughts and emotions carry me at once to the contemplation of the wondrous Being by whom the whole has been created, and continues to be upheld, and that by an agency at once mysterious and omnipotent. Now, as nothing, in nature, can be seen, felt, or thought of, singly, it matters not which of these objects, reflections, or feelings may be called up at any time hereafter: it will, as far as memory serves, be accompanied or associated with the others with which it is conjoined. This simple fact, however, would, if it passed through the alembic of a metaphysician's brains, be mystified under the wonder-working Term, 'Association of Ideas'; by the means of which it has been attempted to account for *Instinct* itself; with which it has no more to do, than with Respiration, Function, or any other operation of the animal economy. So great an influence have mere phrases, that they are endowed by mankind with agency to perform every office in nature: nay, we find metaphysicians even going farther in error than the rest of mankind! Under every point of view, therefore, the expression 'Associated Recollections' is not merely more exact, but more intelligible, than that of the 'Association of Ideas.' When we speak of Associations that are present, and not past, we may call them Associated Impressions.

OF VARIOUS METAPHYSICAL CATEGORIES.

§ 169. From the earliest dawn of thought, up to the present moment, mankind have been the dupes Impelled by an irresistible curiosity, of language. they have endeavoured to compel Nature to give up her secret; and though the wisdom of Egypt had pronounced, with oracular truth, that her "veil had not been drawn aside by any man," and thereby implied that it never could be done; and though a poet of Persia, endowed with more than usual inspiration, had declared that men might desist from the attempt, for that her enigma never had been, and never could be solved; yet still it is, and ever will be, the object of human investigation and perseverance. If we look to those ancient authorities with which we are most familiar, that is to say, to the Greeks, we shall find that this most ingenious people, profiting by the hints they had received from the Phœnicians, Egyptians, and other Eastern nations, who were most renowned in their day for wisdom and civilization, pursued with an ardour worthy of a more fortunate result, and a perseverance that nothing but the insuperable difficulty of the subject could have baffled, the investigation of the great mystery of LIFE. They were not aware

that, independently of the perplexity and incomprehensibleness of the question, they were deceived, at every step, by the very nature of the instrument with which they hoped to obtain a right solution of the mysterious problem. This instrument was language. It will be only necessary to look cursorily at their fundamental distinctions, to be convinced how greatly they were deceived. But if such men as Plato and Aristotle were thus misled, how could it be otherwise with inferior minds? If we contrast the systems of these eminent men with those of other schools, cotemporary and modern, we shall find that the views of all are based upon the same radical errors.

Plato's.

§ 170. Plato, the pupil of Socrates, who was himself the soundest and most modest thinker that Greece, or perhaps any country, has ever produced, flourished at a time when these studies had been brought to a considerable perfection of system, and when the intelligence of the Greeks was at its height. celebrated dialogues, though abounding in surprising beauties and infinite subtleties, are so blended with mysticism and the mysteries of the religion of his country, that it requires all the veneration and admiration that the moderns have for the remains of Greek genius, not to smile, and to feel surprise that one of the ablest men, one indeed of the greatest geniuses of his own or any other age, could have been so deluded by mere fancies. Let us take for example his five Forms, which he considered the basis of existence. They might be explained thus:-

Substance.
Similitude.
Diversity.
Permanence.
Movement.

§ 171. Though commentators give a different interpretation to these five Forms of Plato, I believe that the meanings I have assigned them are very

nearly those he himself intended they should have; because a reference to the Categories of Aristotle (which were doubtlessly framed in opposition to them) will, evidently, form the best commentary on those of his master. But, that the reader may be able to judge for himself, I subjoin the original terms, and the translation 79 of the words of the commentators, such as they have been handed down from antiquity. Whichever representation the reader may prefer, he cannot but be convinced that they are only reveries, by which their inventor allowed himself to be deluded, through a few sounds. Plato undoubtedly considered that these words represented real entities, or things in nature, by the name he assigned them; and similar beliefs we have seen exist to this day, without the excuse that might be alleged for him.

Aristotle's.

§ 172. The foregoing view of Plato's Forms will, as I have just said, be strengthened by the ten Categories of Aristotle, his pupil and opponent. They are commonly translated as follows:—

^{(19) &}quot;οὐσία, the principle, essence. ταὐτὸν, the same, regarding the relation it bears to itself and other things. ἔτερον, the other, when one varies from another. στάσις, while it keeps its station, or preserves a unity. κύνησις, motion, or that by which it exerts a power to act."—Dr. Francklin's Translation de Natura Deorum.

Substance. Time.

Quantity. Situation.

Quality. Possession.

Relation. Action.

Place. Suffering 80.

§ 173. When we remember that the systems of these two eminent men are completely in contrast; and that though the first took the *ideal*, and the second the *real* view of nature; we must see that both were deceived by language⁸¹; for their terms,

(80) οὐσία, πόσον, ποίον, πρόστι, ποῦ, πότε, κεῖσθαι, ἔγειν, ποιείν, πάσγειν. (81) "Aristotle held, against Plato, that previous to, and independent on matter, there were no universal ideas or essences; and that the ideas or exemplars, which the latter supposed to have existed in the divine mind, and to have been the models of all created things. had been eternally impressed upon matter, and were coëval with, and inherent in, their objects. Zeno and his followers, departing both from the Platonic and Aristotelian systems, maintained that these pretended universals had neither form nor essence, and were no more than mere terms and nominal representations of their particular objects. The doctrine of Aristotle prevailed until the eleventh century; when Roscellinus embraced the Stoïcal system, and founded the sect of the Nominalists, whose sentiments were propagated by the famous Abelard. These two sects (Realists and Nominalists) differed considerably among themselves, and explained, or rather obscured, their respective tenets in a variety of ways."-Note to Dr. Maclaine's Translation of Moshem's Ecclesiastical History. It was not Zeno, but his master Stilpo, the Megarean, who first maintained the position that Universals and Species had no other existence than as words. It is to him, and to Roscellinus in modern times (see § 18), that we must assign the doctrines held by the Nominalists. Neither the one nor other, however, appear to have doubted the Reality of qualities. Upon this point all philosophers seem merely to have differed, as to whether they existed in the Object, or in the Mind. See my remarks in §§ 64-68.

though all used in different senses by both, were mere Abstractions, and therefore possess no claim to be considered as a correct analysis of nature. Plato's Forms were undoubtedly understood and conceived by him to be something as actual as his own existence; and though it might be argued that Aristotle intended his only as a Classification, yet let any candid person examine his metaphysical system, and he will be convinced that Aristotle took all these words as expressing real entities, just as has been done subsequently by his followers, the Realists among the Schoolmen: Aristotle believing them to exist eternally in Matter, as Species; Plato, in the Divine Mind, as Universals.

§ 174. It will not be uninteresting, to compare the foregoing divisions of the Academic and Peripatetic schools with those of India. There is such a general affinity between them, that they could not have had an independent production, but must have stood, more or less, in the relation of parent and offspring, whether the originality be conceded to Greece or to India. It may, however, be remarked, that the Hindu systems are all complete and peculiar in themselves; and every part is in harmony with the whole of any one system, which likewise contains principles totally unnoticed by the Greeks. For the originality of the Hindu systems, it may be further remarked, that they have all a

special application, being intended either to support or controvert the texts of the Vedas, or Hindu Scriptures; which are so ancient, that the peculiar dialect of the language in which they were written (the Sanscrit) was obsolete prior to the expedition of Alexander, about 330 years before the Christian era. To these observations it may be added, that had their logic been borrowed from Aristotle, who was the preceptor of that conqueror, it might be naturally expected to be as perfect as the copies made by the Arabians and the moderns; but instead of this being the case, it bears all the appearance of a system, which, though in its infancy, was a wonderful step in advance upon human knowledge, but deficient in the refinements and subdivisions of the Stagirite: it bears, in short, pretty nearly the same relation to the system of Aristotle, that their Algebra (confessedly of Hindu invention) does to the state of that science in the present day82.

terms

⁽⁸²⁾ The reader, who may take an interest in the subject, can refer to Mr. Colebrooke's exposition of Hindu Logic, in *The Transactions of the Royal Asiatic Society*, Vol. I. pp. 92—118; or to his *Miscellaneous Essays*, Vol. I. p. 261. In *The Asiatic Journal* for February 1839, Colonel Vans Kennedy has given an exposition of Hindu logic; in which he differs, apparently with reason, from Mr. Colebrooke, and I think the following passage deserving of quotation:—"But it seems, at the same time, evident, that the argument of Gautama and the syllogism of Aristotle are too essentially different, in both form and substance, to admit of its being supposed that the one was derived from the other. For the validity of the syllogism depends upon this axiom, that if two

Gotama's.

§ 175. Gotama is the reputed founder of logic in India. The division of "The Predicaments," or "Objects of Proof," are six, according to Kanâda; viz.

Substance. Community.

Quality. Particularity.

Action. Relation 83 (intimate).

To this arrangement other authors add a seventh, Privation, or Negation. Besides these Categories, others are alleged, by different authorities.

terms agree with one and the same third, they agree with each other; but the nature and properties of the term which should be employed as the middle terms have not been explained by Aristotle. Gautama, on the contrary, founds the conclusiveness of his argument, on such a property being assigned, as a reason for affirming the proposition as will prove the predicate; and, on the applicability of the reason being shown, by adducing, in its support, the instance of some object which possesses the property specified in the reason and predicate. In this case, therefore, it is not sufficient to lay it down as a rule, that if A can be attributed to every B, and B to every C, then A is attributable to every C, and to frame syllogisms with the letters of the alphabet: for the argument of Gautama cannot be formed, unless a distinct notion of the properties of the subjects by which the question is to be proved has been first conceived. When, however, this argument is duly considered, it will, perhaps, be admitted, that it exhibits a more natural mode of reasoning than is compatible with the compressed limits of the syllogism, and that its conclusion is as convincing as that of the syllogism." p. 146.

(83) Or, Aggregation.

§ 176. Mind, in common with all substance (for they hold it to be such) is the *substratum* of eight qualities; viz.

Number. Disjunction.
Quantity. Priority.
Individuality. Subsequence.
Conjunction. Faculty.

§ 177. This last arrangement, which is made by Kanâda, is nothing more nor less than another set of Predicaments or Categories, though termed *Qualities* by him. But as the Predicaments, in common with all Qualities, are considered as real essences by the Hindus, as well as by ourselves, their distinction of the classes into Categories and Qualities makes no difference in their *natures*.

Jina's.

§ 178. The Jainas (followers of Jina), who are an ancient and a celebrated sect in India, have so many opinions in common with the Bauddhas (followers of Buddha), as to have been often confounded with them, hold that there are five $K\hat{a}rana$, or Causes, which unite in the production of all events. These are as follow:—

- 1. Time.
- 2. Nature.
- 3. Fate or Necessity.
- 4. Works, or the principle of Retributive Justice.
- 5. Mental Effort, or Perseverance.

§ 179. The Jainas, besides the above, comprehend nature under the six following Categories; viz.

Motion.
 Rest.
 Life.
 Vacuum.
 Matter.

With the exception of Matter, which is a Generalization of Body, and is therefore a Concrete Term, the whole of the above are Abstractions; though the first group is considered as Causes, and the last as Principles or Categories: but, in both cases, they were perfect Realities in the conception of their framers and followers ⁸⁴.

§ 180. The systems of Gotama and Jina will be sufficient to serve as an illustration of the identity of the fallacy into which the Hindu philosophers have fallen, in common with those of other countries.

Zoroaster's.

§ 181. The next system, to contrast with those that have been just given, is that of the divisions of the soul, which the Parsees, or descendants of the ancient Persians, attribute to Zoroaster. If not

^(*1) I have preferred the above exposition given by Colonel Miles, as more popular, to that of Mr. Colebrooke, printed in Vol. IX. p. 287 of the Asiatic Researches of Calcutta, and reprinted in his Essays, Vol. II. p. 191. See Transactions of the Royal Asiatic Society, p. 335.

handed down from antiquity, it was in all probability framed in India, or borrowed from that fertile hot-bed of metaphysical systems.

- § 182. "The soul of man, instead of a simple essence, a spark of that eternal light which animates all things, consists, according to Zoroaster, of five separate parts, each having peculiar offices:—
 - 1. The Feroher, or principle of sensation.
 - 2. The Boe, or principle of intelligence.
- 3. The Rouan, the principle of practical judgment, imagination, volition.
 - 4. The Akho, or principle of conscience.
 - 5. The Jan, or principle of animal life.

When the four of these, which cannot subsist in the body without the last, abandon their earthly abode, the Jan mingles with the winds, and the Akho returns to heaven with the celestial Rouhs (or spirits); because, its office being continually to do good, and shun evil, it can have no part in the guilt of the soul, whatever that may be. The Boe, the Rouan, and the Feroher, united together, are the only principles which are accountable for the deeds of the man, and which are accordingly to be examined at the day of judgment. If good predominate, they go to heaven; if evil, they are despatched to hell. The body is regarded as a mere instrument in the power of the Rouan, and therefore

not responsible for its acts. After death, the Akho has a separate existence, as the Feroher had previous to its birth ⁹⁵."

§ 183. It is not possible to pronounce on the terms contained in the division of the soul as attributed to Zoroaster, without a thorough knowledge of the language in which the works, considered as the production of that sage, are written. In all probability, even if we admit of the authenticity of these five terms, we shall not be far mistaken if we suppose that the most of them are but abstractions used in a real or personified sense. That this is the case with the last of the five, that is, with Jân, is certain; as it still means life or vitality, in the modern language of Persia. But whether ancient or modern, this dissection of the soul is of the highest interest, as an additional instance of the delusions of the human mind; and though not strictly in place here, among the Categories, it is well worthy of attention.

Locke's.

§ 184. It is to our own country that we must look for the next set of Categories of nature: and

^(*5) Not having the Zendavesta of Anquetil du Perron at hand, I have borrowed the above extract from my friend Mr. James Baillie Frazer's judicious account of Persia, forming one of the Volumes of The Edinburgh Cabinet Library.

Locke has distinctly furnished us with a system, in which he has shortly and explicitly unfolded his views. As he was a Realist, in every sense of the word, we cannot hope to find that he does more than substitute his own set of General Terms for those of others. On reading them down, the reader will see that they tell us nothing new; and, that they are arranged upon the notion, that Abstract Words are real entities. They do not even display any remarkable ingenuity or depth of thought, and may even be contested as to the general views they inculcate. He says:—

"And thus I have, in a short draught, given a view of our *original Ideas*, from whence all the rest are derived, and of which they are made up; which if I would consider, as a Philosopher, and examine on what Causes they depend, and of what they are made, I believe they all might be reduced to these very few primary and original ones; viz.

Extension;

Solidity;

Mobility, or the power of being moved, which by our senses we receive from body;

Perceptivity, or the power of perception or thinking;

Motivity, or the power of moving, which, by reflection, we receive from our minds.

I crave leave to make use of these two new words, to avoid the danger of being mistaken in the use of those which are equivocal. To which if we add

> Existence, Duration, Number,

which belong both to the one and the other, we have, perhaps, all the *Original Ideas*, on which the rest depend. For by these, I imagine, might be explained the nature of colours, sounds, tastes, smells, and all other *Ideas* we have, if we had but faculties acute enough to perceive the severally-modified extensions, and motions of those minute bodies which produce those several sensations in us." ⁸⁶

Kant's.

§ 185. As the last but one, though not the least renowned, and certainly the most perplexing of those who have added to these systems, I proceed to consider the view of *The Human Mind*, and of *Nature*, given by Immanuel Kant. This extraordinary man was so misled by his own subtlety and ingenuity, that he conceived the notion of relieving metaphysics from the charge of uncertainty, so justly urged against them. He was aware, that that, in which no *fixed* principles were universally acknowledged, could rest upon no solid foundation.

⁽⁸⁶⁾ Conduct of Human Understanding, Book II, Chap. xxi. § 73.

Among all preceding writers on the subject, he thought that Hume had, at all events, made one capital discovery, in his Essay on a Necessary Connexion (§§ 82, 83.); and, that if there existed one notion (necessity) not drawn from experience, which Locke had convinced most thinking people was the only source of knowledge, there might be more. Following up this notion, he thought he had discovered eleven others; and upon these, which I shall enumerate presently, he built his dark and incomprehensible system. But this was not all; for it struck him, that as one of the main difficulties that beset astronomers was removed by adopting the system of Copernicus in place of that of Ptolomy, or, in other words, in preferring the belief that our planet revolved about the sun, and not that the sun and other heavenly bodies revolved about us, he conceived, that by making Time and Space to exist in and not out of the mind, he took away the great stumbling-block in metaphysics: thus making all nature a subjective, and not an objective existence. Yet, strange to say, he at the very same time made the following statement:-"Our exposition, consequently, teaches the Reality (that is, the objective validity) of space, in reference to all that externally (?), as object, can be presented to us; but, at the same time, the *Ideality* of space, in reference to things, if they are considered in themselves by means of reason—that is, without regard

to the nature of our sensibility⁸⁷." Here he evidently contradicts himself; and he well knew why; for if all nature exist only in the mind, what becomes of all other beings? He therefore slipped in this non sequitur, though it was contrary to the fundamental position he had laid down, that it might serve as a loop-hole, at which to escape, if hard pressed upon the point.

§ 186. By these bold assumptions, joined to his twelve celebrated Categories, he obtained what he considered would enable him to construct a system that might rest, like mathematics, on data that would be universally admitted, and consequently be no longer dependent on proofs got from groping in the dark⁸⁸, that is, from uncertain experience, or, as he calls it, empirical knowledge. By the means of such foundations and assumptions he has built up, with a style, and terms of extreme obscurity, a system so intricate and complicated, that it has puzzled his warmest admirers and followers to make out what he would be at, from time to time. To this system he gave the name of transcendental, because it transcended all proofs drawn from experience; and made metaphysics an Abstract Science, or one in which every problem could be solved by principles existing in the mind itself. It was also his opinion,

^{(&}lt;sup>87</sup>) English Translation, page 33.

⁽⁸⁸⁾ See some able remarks on the Philosophy of Kant, in *Tait's Magazine* for *June* 1836.

that—" Only by means of this CRITIC can the roots themselves be cut off from Materialism, Fatalism, Atheism, freethinking Unbelief, Fanaticism, and Superstition, which may be universally hurtful;—finally, also, from Idealism and Scepticism, which are more dangerous to the schools, but hardly can pass over to the public." The attempt was worthy of his genius; but though he constructed his break-water with the utmost skill, yet it is evident that it could not, built as it was upon so weak a foundation, withstand the mighty, though scarcely audible billows that rolled continually against it from the great ocean of Common Sense; and which, in fifty years, have made so many ravages in its best compacted parts, that it lies a stupendous wreck, over which the tide of opinion rises and falls without causing further devastation; leaving it as a memorial for future generations, who will exclaim, on beholding it-' There were giants in the earth, in those days!'

§ 187. It is now only necessary to analyse his system, which is likewise founded upon another assumption; namely, that the human mind is compounded of three estates, or separate divisions, that is to say, of sense, understanding and reason. But I shall begin with the consideration of *Sense*; and merely draw the reader's attention to the following synoptical view of Kant's system ⁸⁹.

⁽⁸⁹⁾ Taken from Mr. Wirgman's Principles of Kant's Philosophy.

THE MIND.

SENSE.

2 Receptivities.

Time.

Space.

UNDERSTANDING.

12 Categories.

QUANTITY.
Unity.
Multitudes.

Totality.

QUALITY.
Reality.

Negation.
Limitation.

RELATION.

Substance and Accident.
Cause and Effect.
Action and Re-action.

Possibility.
Existence.
Necessity.

REASON.

6 Ideas.

Absolute Totality.

Absolute
Limitation.

Absolute Substance.

Absolute Necessity.

Absolute
Cause.
Absolute

Concurrence.

RESULTS.

INTUITION,

present in TIME and SPACE.

CONCEPTION,

absent in

IDEA, out of time and space.

SENSE.

§ 188. With regard to Sense, it is evidently an Abstraction, that can therefore have no real and separate existence. We can feel; and when we abstract, we can talk of Feeling, or its synonymous Abstraction, Sense. So much for the basis. Let us now consider its dependent notions.—This nonentity, Sense, has two other non-entities, which he calls Receptivities (Holding-nesses). These two receptive non-entities have been vulgarly called Space I have already shown, that, though and Time. classed together (§§ 115, 116), they ought to be kept separate; because the first has a real, and the second only a relative existence; that is, it is a notion or word we have derived from the apparent revolution of the sun round the earth. Both Space and Time he holds to be Mental Receptivities, that constitute the Sensitive Faculty.

Space is, he says, a receptivity for matter in *extension*.

Time is also a receptivity for matter in succession.

§ 189. Now, according to Kant, both Space and Time only exist in the mind, and constitute two

Senses; the first of which he calls external, and the second internal. But he does not explain how a second being, or percipient, can exist, if he thus takes away the outness of Space; for it is self-evident, that all nature, according to this system, can only exist in the mind of the one person who conceives, and all other percipients must be only modes of the one individual who has such a faculty: and Kant thus reduces every thing to an egoïsm, of which his own mind was the centre and boundary. He is here, at the least, inconsistent, even if we could admit of the basis of his system. This is perhaps enough for Sense.—The next division is the Understanding.

UNDERSTANDING.

§ 190. The *Understanding* he takes for another Reality; and conceives that it has four grand divisions, to which he gives the names of—

Quantity, Quality, Relation, Modality,

respectively. Under each of these heads he places three sub-divisions; making thus, in the whole twelve, according to Mr. Wirgman; but fifteen according to the new complete translation of the *Critick of Pure Reason;* because to those under Modality we have the opposite set resulting from Negation; that is to say,

Impossibility, Non-existence, Contingence.

These twelve (or fifteen) terms are, according to Kant, real divisions of the Understanding, which he took, like Sense, to mean a real substratum of perception. They were, in his view of his philosophy, a sort of original types or standards, to

which every thing perceived was referrible, and which confer their form upon every object in nature. They are, indeed, to be considered as normal principles, that give a reality and shape to every thing. To what degree they can be entitled to this pre-eminent and peculiar office, the reader will best judge from what has already been said: and if he still believes that the mere figments of the intellect, which it employs, like ciphers, to reckon with, have a separate and independent existence, why then he can take Kant at his word; for, of course, he can never hope to comprehend him in detail. He must not however forget the remarks that I have already made on the Understanding (§ 160); namely, that all we can say, in any case, is, IVe understand; and that, consequently, there is no such Faculty as the Understanding.

REASON.

§ 191. Reason, according to Kant, unites the twelve Categories that exist in the Understanding, and which are themselves out of Time and Space, into six ideas, which are absolute; namely,

Totality, Necessity,
Limitation, Cause,
Substance, Concurrence.

He considers Reason as a *spontaneity*, or active Faculty, *free* from Time and Space, in the same way as the Understanding was *out* of space.

§ 192. Such is a brief, but I believe accurate ⁹⁰, sketch of the basis of Kant's celebrated system. If we cease to believe in the reality of Abstractions, we can no more think that it is a true representation of nature, than we can that Aladdin's palace had a real existence; and it is as futile to inquire into its principles and consequences, as it would be to speculate on the style of architecture and the

^(%) I have endeavoured not to misrepresent this almost unrepresentable system; but if I have not succeeded, I hope I shall be excused for a failure, where so many have had the same fate before me.

proportions of that celebrated edifice of Oriental romance. Throughout his work, Kant displays consummate ingenuity, in constructing his dark and useless labyrinth: and he has cemented the whole together into a cyclopean mass, by the help of a profound knowledge of logical forms, that will long preserve it as an object of wonder and admiration, leaving far behind it all other systems, for subtlety, intricacy, and darkness,—and, I may add, for utter uselessness. As a metaphysical feat, it will, in all probability, never be surpassed; but it is merely to be considered "a cunningly-devised" system, in which Logic is abetting Realism in an attempt to waylay the Human Understanding. Of this system I said, on a former occasion, as follows:—" The system of Kant makes phenomena, or the things seen, to arise from noumenon, or what is known; which two words, when released from the juggle of grammatical forms, imply, that we know by seeing, what we knew by knowing, or, in plain English, we know what we knew. Afterwards, by converting this noumenon, a passive participle implying 'what is known,' into something that is the type of our ideas, he has, by the help of Realism, which he has carried to an unprecedented extent, and by the use of uncouth and obscure terms, framed a system so dark and complicated, that it has served to hoodwink most of his own countrymen; although it has been rejected, with one voice, by the unsophisticated sense of the

rest of mankind;"—an opinion which I still see no reason to alter. The admirers of this eminent metaphysician may perhaps think that his system ought to have been given more in detail; but my object, throughout the whole of these pages, is with fundamental notions; and if these are false, of what value are the consequences, however consistent, derived from them? Indeed, nothing but the great celebrity of Kant's system, and the fact that his Categories are its very foundation, have led me to deviate from the plan I have almost invariably followed, of merely analysing the materials of metaphysicians. Nor, indeed, is it necessary: for Kant has himself said, "Upon the solution of this problem (synthetic judgments), or upon a satisfactory proof that the possibility, which it longs to know explained, cannot at all, in fact, take place, DEPENDS, NOW, WHE-THER METAPHYSICK FALLS OR STANDS 91." Now, as I have shown, § 90, that the very basis of this synthetic judgment is altogether a fallacy, it follows that the superstructure raised upon it is a mere castle built in the air, and that it has, consequently, been treated at greater length than it really merits 92.

⁽⁹¹⁾ Critick of Pure Reason, p. 17.

⁽⁹²⁾ Kant's system reminds me of the reply made by a Quaker to a Materialist, to whom he had listened for some time with great patience: "Friend! thee art DARK, but not DEEP."

F. W. Schelling's.

§ 193. The last system of Categories that I have to show the reader is that of Frederick William Schelling. This view is translated from the *History of Philosophy*, by Tennemann, as rendered by M. Victor Cousin⁹³.

- I. The Absolute, the whole in its primary form (God), manifests himself in
- II. Nature (the Absolute, according to its secondary forms).

It then produces itself in two Relative orders; viz.

THE REAL.

THE IDEAL.

Under the following powers:-

Weight—Matter, Light—Movement, Organization—Life, Truth—Science, Goodness—Religion, Beauty—Art.

Above, as reflected forms of the Universe, place themselves:

Man (the Microcosm). The State.

The System of the World (the external Universe). History.

§ 194. Of this system, of which I am informed the able author is still living, I need not say any thing particular, except that it displays the order and method for which the Germans are distinguished.

⁽⁹³⁾ Tome H. p. 305.

§ 195. The whole of these Categories, from Plato to Schelling, the reader must be convinced, are only so many Abstractions; of which it will be unnecessary for me to say any thing more, after all the remarks I have previously made on such words. It is clear, therefore, that as long as we believe in the Objective Reality of Nature, we must consider them merely as, vox et præterea nihil.

CONCLUSION.

§ 196. From the preceding observations, it is evident that Metaphysical Systems are mere creatures of the fancy, and that they are as much in contrast with one another as could be expected with reference to the nature of their origin. The low estimate in which they have been held by the common sense of the bulk of mankind has not been without justice, though it has only arisen from a sort of blind instinct. Men may be dazzled by what they hear, particularly when it is accompanied by the charms of a pleasing style and graceful imagery; but if the foundation be not laid in nature, it makes no more impression on the mind than a passing cloud in summer; for nothing can produce lasting conviction, or create a desire for closer acquaintance, but what is the very image of truth. Boileau has said, most justly,

" Il n'y a rien de beau que le vrai."

§ 197. When we hear words that reflect nature accurately and beautifully, we are conscious that our minds are nourished with such wholesome

aliment as its *healthy* condition universally demands. It is only to the conviction of the inherent truth of the Abstract Sciences, that is, of their consistency with nature, that they are cultivated with such pleasure and assiduity ⁹⁴: but take away that conviction, and they would be as little followed or prized as metaphysical speculations; which are truly what the poet has described them,

"Vain wisdom all, and false philosophy."

§ 198. On the one grand point, however, to which I have directed the reader's attention—that is to say, the true nature of Abstract Words—I must now make a few concluding remarks. Reasoning, it must be seen, is entirely dependent for its existence upon Abstractions, and differs but in its greater variety and extent from Calculation. The last process,

⁽⁹⁴⁾ Mathematical science busies itself with deducing, by calculation, the laws that depend upon the relations of number and quantity, in those things of which we are cognisant through our senses. But metaphysics only consider the relations existing between Abstractions that have no existence, except as sounds, and which represent nothing in or our of nature. As a science, therefore, it is as chimerical as either alchymy or astrology, though requiring the exercise of powers of mind of the highest order. Indeed, arithmetic and mathematics are only kinds of metaphysics applied to rational and useful purposes, by the means of symbols instead of sounds. Metaphysics, therefore, may be followed as a sort of intellectual gladiatorship, or gymnastic discipline, tending to give strength and suppleness to the mind, and fit it for the real combats of life, which, in comparison, will be mere pastime.

every one feels, is merely effected by symbols; and the former, I believe, I have clearly demonstrated, is accomplished by means precisely similar. The intellect is as dependent upon such words for its efforts as the arm is upon the fingers, by which it grasps whatever it has the strength to hold up; and we are as much driven to the use of language by instinct, as we are to that of our teeth and jaws for biting and mastication. Above all other points, however, the reader should ponder on the wonderfully curious nature of Abstract Words; on the principle of which we cannot too deeply fix our attention, from its high importance and universality. We must see, that we are impelled by nature to the employment of one or more words that are equivalent, by usage, to the Term STATE: and when we search for the original of this most mysterious symbol-which is, in fact, whether expressed or understood, the foundation of all Abstract language—we find that the human intellect can give no account of that by which it is rendered the god of this nether world!

§ 199. In fine, I cannot do better than conclude with the following quotation from Locke; which may be considered as the complement of the Reflection which I have placed at the beginning of these remarks, and in the justness of which all will agree:—

"Were the capacities of our understandings well considered, the extent of our knowledge once discovered and the horizon found, which sets the bounds between the enlightened and dark parts of things—between what is, and what is not comprehensible by us,—men would perhaps with less scruple acquiesce in the avowed ignorance of the one, and employ their thoughts and discourse with more advantage and satisfaction in the other."

^(%) Locke On the Conduct of Human Understanding, Book I. Chap. I. § 8.

APPENDIX.

NOTE (A). § 6.

1. Nothing can be more delusive than the apparent significancy of the terminations ness, ship, hood, head, &c. If we look for the original of ness, we find it in the Saxon pirre. At first sight, we might suppose that the termination in goodness, and such words, was identical with that in Sheerness, and similar names of places; but the latter is derived from the Saxon pere, a nose, implying a projection of the land, similar to the effect of that feature on the face. In all probability, if we had not been able to refer to the original distinction between virre and vere, etymologists would have insisted that the termination in goodness, &c., had been derived, like the names of headlands and promontories, from nose. Ship, hood, head, &c.. though apparently familiar terms are equally obscure; ship being derived from the Saxon reip and revp; and the same word is written schap in Dutch. So the terminations hood and head can be deduced from the Saxon has, the German heit, and the Dutch heid; and all these terminations are equally insignificant, in whatever language they are found. In the Sanscrit language, Abstract Words are made by such terminations as TWAM, TA, YA, and TIS. The first of these has been corrupted into the Saxon son, and the English dom, in freedom, &c. Ta has given rise, apparently, to the Greek $\tau\eta\varsigma$, and Latin ras, as in λευκότης, whiteness, and vitalitas, life or livingness. The ris is evidently corrupted into the Greek σις, in such words as στασις, state, and ποίησις, formation, &c. Not one of these terminations can be traced up to any word having a meaning. If they ever were significant, it could only be in the earliest antiquity. In the Arabic language, we find the termination in the termination in the Arabic language, we find the termination in the termination in the termination is derived from kabil, able; and yet we are certain, by the genius of the language, that this termination never was significant, but is purely artificial.

2. In conclusion, I have only to repeat, that this instance from the Arabic is very valuable; as tending to show, that possibly the terminations I have just explained may never have had a separate existence, as significant words, in the languages where they are found. If the mind, as I have already said in § 11, is led to make this jump, it might at the same time call up an unmeaning sound on an emergency. Were I, for want of the right expression, in the hurry of conversation, to praise Alexander's greatsen of soul, I might, perhaps, be nearly as well comprehended as if I spoke of his greatness of soul. If such words ever had a meaning, it may have been very different from what the sense now requires; for we have seen, in § 12, that the Sanscrit and Arabic languages totally differed from the Greek and Latin, in the words they have adopted to express the notion of State.

NOTE (B). § 79.

"Some Observations on the Hindu and European Notions of Cause and Effect.

1. "A careful consideration of what the Hindus have said on Cause and Effect makes it evident that they have fallen into the same error as the Greeks and modern writers on that subject; and that they have blended the *Relation* of *Cause* and *Effect* with the question of *Source*

and Product, as well as with that of Doer and Deed, Agent and Act; and that they have also used the word Cause in the sense of Efficient, Maker, Motive, Reason, Origin, &c., as is done by our own metaphysicians. The Latin causa, the Greek $\alpha i \tau i \alpha^1$ and the Sanscrit metu, are all simple terms, the verbal derivation of which is not now obvious; so that, no means remain of defining their actual import by analysis, nor by any ulterior reference: but it will be seen, in the course of the following remarks, that this cannot be assigned as the reason of the great obscurity and confusion in which the true meaning of these words is involved.

2. "Though mankind, by that discrimination with which they are commonly endowed, not only, generally speaking, use language correctly, but immediately feel the impropriety of any thing that is contrary to its true analogies, yet there are very few indeed who could, even after some labour of thought, give any thing like a rational solution of the nature of the words they have been employing, Most people, if they were asked what they meant by the word Cause, would fly to an illustration, and point to a Thing of some kind as being a Cause. But this would be an error; for the word Cause implies the Relation in which the thing stands, and not the Thing itself. Cause, therefore, is merely a General Term which the mind employs to mark one of the two Relations in which any thing may, under certain circumstances, be contemplated. A word that implies a Relation, must often, by its nature, have another that is invariably understood, and which is its Correlative attendant: thus the term Father implies

⁽¹⁾ The Greek aèréa is, in all probability, derived from the Sanscrit nert. The want of etymological significancy in these words is a proof of their antiquity, and shows that they were of the first necessity; as is also clear from their import. The Sanscrit kârana, implying the making to do, is evidently of much later use.

that there is a *Child*; *Husband*, that there is a *Wife*, &c.; and, by the same analogy, Cause implies that there must be something else, which we call an Effect: but the sense of the word *Thing* is complete and absolute in itself, without the aid of any other word. Even Locke, when he defines Cause as a substance exerting its power into act², has fallen into this mistake; for Cause can never be a substance; but a substance may stand in the Relation of a Cause which is to produce an Effect.

- 3. "These general distinctions have been premised, for the purpose of leading the mind of the reader to the true consideration of this not unimportant question; as the fallacies of many of the ablest writers have derived their importance solely from the obscurity and confusion in which the import of the term Cause has been involved. We have just seen that a substance cannot be a Cause, but that it may stand in the Relation of Cause: therefore, till there was a mind to perceive the Relation between events, there could be no Cause, as it is merely a mental distinction.
- 4. "Having thus cleared away all other imports from the word Cause, except that which really belongs to it, namely, a Relation of something that is perceived to be prior to another Relation that is called an Effect, we must see, that when it is employed for Source, Origin, Reason, Motive, Efficient, Agent, or Maker, we are really talking about

^(*) I have not been able to verify this quotation, which is taken from Johnson's Dictionary, where it is employed to elucidate the word Cause: but this is of very little consequence, as it is only necessary to refer to Locke's Essay on Human Understanding, Bk. II. Ch. XXVI. § 2, to see that it is supported by his argument on Cause and Effect; for he says there, A Cause is that which makes any other thing, either simple idea, substance or mode, begin to be; and an Effect is that which had its beginning from some other thing. This definition, which applies very well to Agent and Result, does not contain any allusion to the Conception of Relation, which alone constitutes that of Cause and Effect.

things with which it has no logical affinity. When we say, therefore, that God is the first Cause of all things, we mean, though we express ourselves incorrectly, that he is the Source or Maker of all things. When, again, we talk of secondary Causes, we must intend the subsidiary agents, or means, by which an Effect is produced. By the same analogy, we cannot with propriety speak of efficient and material Causes; for the first means an Agent capable of effecting anything; and the second, a Source from which something proceeds, and which can have nothing to do with the real meaning of Cause; that is, the conception of relation between the Doer and the Deed, or the Agent and the Act.

- 5. "The importance of the foregoing distinctions and elucidations will be immediately felt, when the application is made to the arguments of Kapila, and the other Sánkhya philosophers. For when they assert 3 that Effects exist in their Causes, and that "what exists not, can by no operation of the Cause be brought into existence," and elucidate their meaning by saying that the oil previously existed in the seed from which it was expressed, we must immediately see that by the word Cause they intend a Source from which a Production proceeds; which is a mere truism; for, undoubtedly, without a Source there could be no Production; but when they apply it to the Divine Source of all things, they beg the question; for they might as well argue, that, as every numerical series is composed of units, a unit must come from something else, which, every one will allow, would be nonsense. Now, to continue this illustration, it may be said, that just as the unit is the admitted starting point of numbers, so must the Deity be the Source of all things; and all Productions. natural and artificial, proceed from his Essence, as all multiples do from the unit.
 - 6. "The whole of this confusion, in the use of the term

⁽³⁾ Trans Eog. As. Society, Vol. I. p. 38.

Cause, has arisen from the very nature of the human mind: which, deriving all its ideas of language from sensible objects, assimilates every thing to substance, and considers all Abstractions as realities. It is on this account that employing, as we do, such words as Cause, from infancy upwards, as something real, we never arrive at any idea of their real import, but by close reflection. Now, experience proves that this is an operation beyond any systematic effort of the generality of mankind: and if the mind does even occasionally light upon the truth, it is only as is exemplified in the electric flash, which gives a momentary gleam, to leave us at once in the obscurity in which it found us. Owing to this inveterate and almost inevitable mental error, and to the consequent confusion of ideas, we have been led to the invention of a verb meaning to cause; and we make use of such expressions as "He caused him to fall." But as the verb to cause, in such senses, means to make to do, or to be, and therefore implies that he made him fall, it must express physical Agency, and not abstract Relation; for when the phrase is properly expressed, it means, "He, standing in the Relation of Cause, made him fall." This misuse of language is not of the least consequence in the common business of life, as it misleads no one; but it is of the highest importance when we reason about fundamental notions; as it then becomes the source of the worst errors of philosophy, deceiving those who are considered the infallible authorities of the rest of mankind; and thereby riveting the human mind in the fetters of their own mistakes. Such being the nature of language, we cannot hope, nor is it possible, to alter its course: but it is incumbent on philosophers to bear its imperfections in mind, when they attempt to philosophize upon the nature of things, and to endeavour to prevent it from misleading themselves, as well as those for whom they write.

7. "It may, however, be objected by those who have not attended closely to the tenour of these observations, that Cause and Effect have always been regarded by philosophic writers as standing in a State of Relation to one another; and that, as a proof, they always speak of "the Relation of Cause and Effect." This is perfectly true; but while they have so spoken, they have always argued as if Cause were something real, instead of a mental Conception. they have converted it, by their mode of argumentation, into an entity, or rather a substantiality, possessing physical agency, and capable of producing effects; and this is proved, not merely by the quotation from Locke, but likewise by the use of the verb to cause, implying to make to do; and the noun of action, causation, signifying the act of making to do, which such writers employ, on the same occasions, with equal incorrectness. By a strange inconsistency, arising from the deceptive character of language, they convert the Relation of Cause into an Agent; and, at the same time, fancy they employ the verb to cause, and the noun causation, in a manner that only intends Relation! So inveterate are these errors in our way of thinking, owing to the nature of our minds as well as of language, and of habit as the consequence of its employment, that it will require no ordinary effort in the reasoner who may attempt to liberate himself from their thraldom; and an attentive perusal of the arguments that have been adduced on the nature of Cause and Effect, by any one who shall keep the foregoing distinction in view, will make him feel that those stately disquisitions that have been raised on the fallacy here exposed are often but mere verbiage, rox et præterea nihil, or, at the best, but as the baseless fabric of a The same kind of fallacy could with ease be shown, on nearly similar grounds, to be the case with all the arguments generally used about Nature and Necessity.4

⁽⁴⁾ This I have since done, and the Reader will find them §§ 33--39 of the text.

8. "The only chance of preventing the errors that have been pointed out from being committed by those who are not accustomed to analyse their own thoughts, is to remember. that in ninety-nine cases out of a hundred, in which the word Cause is employed, it is involved in this fundamental error. They should therefore always consider, when they adopt the term, whether they use it in any of the many senses that have been already pointed out; and if so, they should employ the specific word in its place; that is, if they intend to speak of an Agent, a Maker, &c., they should employ those words, and no other. With respect, too, to the verb to cause, and to the noun causation, these should never be employed in any case where the Relation of Cause and Effect is intended; as they invariably imply physical and not abstract Agency, and they consequently establish the very point of dispute in such cases; namely, the existence of a causer, agent, or doer; which being once admitted, the whole subject of debate falls to the ground. As a proof of the importance of the foregoing distinctions and observations, a few remarks are here added, that will at once illustrate and confirm their truth: and for the purpose of pointing out the constancy of the fallacy about Cause, whenever it is adopted by popular usage for an Agent instead of the Conception of Relation, the word Causer is made to follow it, in brackets. Were the subject clearly and universally comprehended, it would save much chance of confusion if the word Cause were always restricted to the sense of the Relation, and Causer to that of the Agent or Efficient of a result.

When the Hindu metaphysicians, after the enunciation of the rule, give the examples by which the exact import of the term may be inferred, we must see clearly that they sometimes employ the word Cause as the Efficient, Effector, Producer, Agent, or Maker, and sometimes as the Source of production; and often as the Reason, or the

Motive, as well as the *Origin* of anything, just as is done by the metaphysicians of Europe.

10. "When they say, therefore, that there is no distinction between Cause and Effect, and that Effects exist in their Causes, it is clear, from the example they give, namely, that The seed of sesamum is the Cause of the oil, and that therefore the oil existed in its Cause, which was the seed, they have palpably confounded Agent and Source, and that the seed can neither be considered as standing in the Relation of Cause, nor as an Agent or Causer. It is quite evident, that the oil, as a Product, must have existed in its Source, which was the seed. So likewise, when they say the Deity is the efficient Cause of the universe, they mean that he was the Agent in producing it; and when they say he was also its material Cause, they imply that he was the Source from which it proceeded. Now, when we assert that God made the world, we mean to say, that he stands in the Relation of its Cause, that he is its Source and its Maker, which senses are all included in the one word, CREATOR: and, by the same reason, the world is contemplated as an Effect of his power, as the Product of his essence, and the Work of his agency. The Sankhya philosophers, therefore, in asserting that that which did not previously exist could not by any effort of the Cause (causer) be brought into existence, have, by separating the Cause (causer) in this case from the Source, made a pelilio principii, and proved their own point by the form of the enunciation: for it will be evident, that when we consider the Cause (causer) we call First, we must not argue as we would about the Cause (causer) we contemplate as secondary; as we cannot here separate Cause (causer) and Source, though we may do so afterwards, for we then know, by observation, that they are distinct. Thus, to borrow a Hindu illustration, the potter is the Cause (i. e. Causer or Maker) of the pot, but he is not the Source of the earth from which it is formed. Sometimes, however, what we call a secondary Cause (causer) must include the two distinctions; as when we say, The spider spins his web, of which he is at once the Cause (causer) and the Source, and consequently the web is a Work and a Product; and the spider stands in the Relation of Source to the web, which is reciprocally in that of *Product* to him. But those who have been familiarised to the jargon of the Schools, which has been current from Aristotle to the present time, will here, perhaps, fly from the real scope of this argument, which is to prove that Cause and Effect simply imply a Conception of Relation, and will say that the oil existed potentially in the sesamum, just as the fruit existed potentially in the tree, and the tree in its seed, and the seed in the preceding tree and seed, &c. But the fallacy of this argument, which has nothing to do with the present question, will be evident, by showing that, by a similar process of reasoning, we might say that all the bullets cast in a mould existed potentially in the mould, as the lead poured in is only the equivalent of the nutriment taken in by the tree and seed. The potentiality which produced the bullets existed in the individual who made the mould and cast the bullets; and the potentiality of the individual exists only in God, who made and sustains him; and the same must be said of the tree and seed, which have their existence from the Deity only, who is therefore the Source of all power and of all existence.

11. "The remarks which are now about to be offered to the reader's consideration, and to which his attention is requested, contain the *real* essence of this question; and they have been kept back for the purpose of preparing his mind for what would have been otherwise unintelligible or inconclusive. Passing over the error that has been pointed out, of Cause being considered as a *Substance* instead of a *Relation*, it is uniformly thought, that in a series of things

acting upon one another, the prior is the Cause, and the subsequent the Effect. Thus, in a series of balls put in motion by the billiard-player, the first ball is said to be the Cause, and the next the Effect to it, and the Cause to the one it strikes; and so on, till the whole are put in movement. That this, however, is not a logical conclusion, will be evident, if we remember that the first ball, which we call the Cause, has, by its movement, only urged on the the second, and that therefore the Effect it produced was the movement of the second. Now, if there were fifty balls, each separately moved by the one that preceded it, it might be said that there were fifty movements; though. in point of fact, we can only say that the fifty balls were moved. Having got thus far, let us consider that it was the movement of the first ball that made the second to change its place, and so communicated an impulse to the whole series. The moment we see this clearly, we must be convinced that it was not the first ball, but its movement, that moved the second; and that the movement of the second made the next change place, till the whole were urged forward in succession. In all this operation, we can not fail to perceive that we have had fifty Effects, and not one Cause; for, otherwise, movement must be both Cause and Effect: and if we suppose it so, then we arrive at this conclusion, that movement stands in the Relation of Cause to movement; which is as much to say, that movement can produce itself, or, in plain language, that change of place can produce change of place! To get at the Cause (causer), therefore, we must go back to the billiardplayer, who put the whole in movement. Now it is evident, that all the Effects witnessed on this or any other occasion are simply changes, that evidence the passage of something that flits from the first to the last; and which, being propagated by the will of the Agent or Doer, forces the ball on, till it is arrested in its progress by impinging on the next,

which it moves in its turn. The something that operates in such changes, mankind have agreed to call POWER; which, as long as we believe in the reality of the external world, is a real essence, capable, under direction, of effecting all the changes that arise from the will of individual beings, or the will of God. But as matter is seen to be passive, or at least may be considered so, from the uniformity of the law of gravitation, Power is the sole means by which it is set in movement, when it is once at rest: but as Power is unequal to produce an Effect, except under direction, it cannot, strictly speaking, be held to be a Cause (causer). but must be merely considered as the medium by which the real Cause (causer), that is, the Deity, carries on all the operations observed in nature. As all things in nature are but results dependent upon the Divine Will, we must, if we desire to be conclusive in our reasoning, admit that there is no real Cause (causer) but God, who, in his character of Creator, forms and sustains all things, being both the Origin and the Agent in the production of the universe: it is HE, therefore, as the Source of being, that stands in the Relation of Causa Causarum to all things: FOR IN HIM WE LIVE, AND MOVE, AND HAVE OUR BEING.

12. "To sum up the inferences to be drawn from the preceding argument, it may be stated, that the definition of Cause and Effect is simply as follows. Whatever produces a change, STANDS in the RELATION of Cause; and whatever results from it, in that of Effect."

Extracted from the Asiatic Journal for March 1836. [Paragraph (11) was written for the purpose of exposing the fallacies resulting from the use of Abstract Words. The juggle of thought arises from making the Abstract Term "Movement" mean a reality, as is commonly done. One Movement does not produce another: it is the POWER, passing from the Agent into the balls in succession, that makes them move one after another.

NOTE (C). § 51.

As I think the reader would like to see what Dr. Johnson has said, in his Dictionary of the English language, on the various senses of the word nature, I subjoin his epitome to Boyle's notions, which he seems to have considered as worthy of attention. To each I have attached some remarks. He says:—

"Of this word, which occurs so frequently, with significations so various, and so difficultly defined, Boyle has given an explication, which deserves to be epitomised:—

(1) "Nature sometimes means the Author of Nature, or natura naturans; as nature hath made man partly corporeal and partly immaterial. For nature, in this sense, may be used the word Creator."

[Nature is here evidently employed in a personified sense, and agrees with the fourth meaning I have assigned it. See § 51. Perhaps the word *Deity*, or *God*, might better represent it than *Creator*.]

(2) "Nature sometimes means that on whose account a thing is what it is, and is called; as when we define the nature of an angle. For nature, in this sense, may be used essence or quality."

[The word essence is not altogether inadmissible in this case; but quality is perfectly erroneous. However, we must feel that it is the property of an angle that is intended here by the word nature. See §§ 69 and 73.]

(3) "Nature sometimes means what belongs to a living ereature at its nativity, or accrues to it by its birth; as when we say, a man is noble by nature, or a child is naturally forward. This may be expressed by saying, the man was born so; or, the thing was generated such."

[This particular sense of *nature* is that which I have included under *contrivance*, in the second meaning I have attached to the word. See § 50.]

(4) "Nature sometimes means an internal principle of local motion; as we say, the stone falls, or the flame rises by nature; for this we may say, that the motion up or down is spontaneous, or produced by its proper cause."

[Nature, in this sense, implies tendency—a meaning that has not been assigned to it in my sketch.]

(5) "Nature sometimes means the established course of things corporeal; as, nature makes the night succeed the day. This may be termed established order, or settled course."

[This is the same as that I have just commented upon above, under number one, and clearly means *nature* personified as an Agent. The explanation is an oversight; and does not refer to *Nature*, but to that which she is supposed to accomplish.]

(6) "Nature means, sometimes, the aggregate of the powers belonging to a body, especially a living one; as when physicians say, that nature is strong; or nature, left to herself, will do the cure. For this may be used, constitution, temperament, or structure of the body."

[This use of nature is also one in which it is personified; and is therefore the same as numbers one and five of Boyle, being what physicians call the vis medicatrix nature, or curative power of Nature; and also the vis vitae, or power of life.]

(7) "Nature is put likewise for the system of the corporeal works of God; as there is no phænix or chimera in nature. For nature, thus applied, we may use the world, or the universe."

[This is what I have classed as the fifth sense of *nature*, as when we sum up every thing under the comprehensive terms *God and Nature*. See § 52.]

(8) "Nature is sometimes, indeed commonly, taken for a kind of semi-deity. In this sense it is best not to use it at all."

[Here we have *nature*, for the fourth time, employed in personified sense, as we have before had it in numbers one, five, and six. See § 51.]

Having thus compared the various senses assigned by Boyle to the word nature, it will be seen that he has given t four times out of the eight as existing in distinct uses, when it really had but one, namely, that of a personified word employed as an Agent. He has not an example of the use of this word, in the two senses of appearance and nateriality. It is unnecessary to say any thing more on the subject, as the reader has now sufficient materials upon which to form his own judgment.

NOTE (D). § 140.

1. The consideration of Infinity, Matter, Space, Magnitude, &c., are sufficient to make us see that human reason can form no adequate notion of the real *substratum* of existence. The following remarks, which I formerly put forth, are so much connected with these questions, that they may perhaps be considered deserving of perusal.

Of the Maxim, "Ex Nihilo, Nihil fit."

2. "The preceding remarks appear to the writer to be indispensable to the taking a rational view of the eelebrated maxim "Ex nihilo, nihil fit" of the ancient Greek philosophers: for though some of the Hindu metaphysicians hold the doctrine that nothing comes from nothing, which cannot be disputed, and seems at first sight to be nearly the same opinion as that of the Greeks, yet it does, in fact, essentially differ from it; as the first merely implies, that without a source there can be no product, but it has no reference to an agent or causer; while the other means something more, by intimating that no agent

could produce a work without having a source from which to elicit his production. The opinion of the Greeks, though essentially true in itself as regards any secondary cause (causer) or agent, is utterly inapplicable to the Deity, as it assumes the fact that his work, that is, the universe, is distinct from his essence; and to prove the fallacy of such a supposition, it is only necessary to consider what would be the inevitable consequences of the eternal and absolute existence of matter, with a Deity separate and attempting to operate upon it; and this may be done without taking into consideration the still greater difficulty, how either could, in that case, have had any claim to infinity.

3. "The absurdity of the maxim of the Greeks, which Hume justly characterizes as impious5, consists in supposing a being existing without a cause (causer), and therefore of himself, and yet unable to produce matter by his flat. A Deity so inefficient as the maxim supposes him, must either have been pure spirit, or pure matter, or a compound of both. If we regard him as pure spirit, but unable to modify matter by his fiat, we must immediately admit that he could not have acted upon chaotic matter so as to give birth to the universe. So likewise if we suppose such a Deity to be pure matter, he must have remained like a statue, inert, powerless, and lifeless; and therefore incapable of creation. There remains, then, but the third supposition; namely, that he was a compound of both spirit and matter. But such a notion as the last implies a self-evident contradiction; for as he existed of himself, without any extraneous cause, how could matter and spirit become blended in his person? If the Deity, being spirit, had no power to modify matter by his flat, how could he operate upon it, so as to give it that form

⁽⁵⁾ Essays, Vol. II. Note (Q).

that was necessary to constitute the corporeity that united both natures in his own person: namely, spirit and matter? But granting, for a moment, that such a union could have arisen by some sort of process or result incapable of being conceived by the human mind, he must still have been under the necessity of fashioning for himself instruments with which to work, like a mere mechanic; and even then it is impossible to conceive how he could regulate the birth, maturity, and decay of universal nature. He could not himself have escaped the influence of gravitation; which we must, on the hypothesis of his origin, suppose to be an inherent and indestructible property of matter. It is likewise evident, that a being so constituted could have no ubiquity; for, as he would be composed of matter, whatever place he occupied would exclude any planetary system, and he and his work could never have occupied the same part of space. He must have been either large or small. If large, all the heavenly orbs must, by the power of gravitation, have clustered round him, just as barnacles attach themselves round a wreck at sea; and merely added to his mass. If small, he could have had scarcely any influence upon any object larger than himself; and he must have fallen in by the same force upon what he never could have formed. In short, the difficulties and absurdities attendant upon the supposition of the independent and absolute existence of matter are too many to admit of its being entertained by any reflecting mind that has given the subject a moment of due consideration.

4. "The sum of the argument amounts to this, that whether we divide or multiply matter ad infinitum, we arrive at a contradiction to common sense; and we have but one conclusion left us, from the incomprehensible nature of the subject, namely, that every thing we see, and feel, and think about, are but results presented to us

by Divine Omnipotence and Wisdom, for reasons which it would be folly in us to attempt to scan."

[Extracted from the Asiatic Journal for March 1836.

NOTE (E). § 177.

"On the Nature of Negative and Imaginary Quantities. By Davies Gilbert, Esq. President of the Royal Society.

"The object of this paper, the author observes, is one that has given rise to much controversy, and has been involved in much unnecessary mystery. Paradoxes and apparent solecisms, when involved with facts and indubitable truths, will always be found, upon accurate examination, to be near the surface; and to owe their existence either to ambiguities of expression, or to the unperceived adoption of some extraneous additions or limitations into the compound terms employed for definition, and which are subsequently taken as constituent parts of their essence.

"The first misapprehension pointed out, is that of considering any quantity whatever as negative per se; and without reference to another opposed to it, which has previously been established as positive. In order to avoid previously-formed associations of ideas, the author prefers employing, in his reasonings on this subject, the symbols (a) and (b) to express this quality of opposition, rather than the usual ones of plus and minus. By the aid of this notation, he is enabled to present, in its full generalization, the law of the signs in multiplication,—a process which, it is well known, is founded solely upon the principle of ratios; and to show, that like signs invariably give the sign belonging to the assumed unity, or universal antecedent of the ratios; and unlike signs, the contrary.

"Since either the one or the other of the arithmetical scales derived from the two unities is in itself equally affirmative, but negative with relation to the other, it follows, that by using the scale of (b), all even roots in the scale (a) will become imaginary, and thus the apparent discrimination of the two scales is removed; so that the properties belonging to the two scales are interchangeable, and all *formulæ* become universally applicable to both, by changing the signs according to the side in which the universal antecedent is taken. Imaginary quantities, then, are merely creations of arbitrary definitions, endowed with properties at the pleasure of him who defines them; and the whole dispute respecting their essence turns upon the very point that has been contested from the earliest times, between the hostile sects of realists and nominalists.

"It is now, however, universally agreed, that all abstractions and generalizations are mere creatures of the reasoning faculty, existing nowhere but in the mind contemplating them. Such, in algebra, are the supposed even roots of a real quantity, taken in the scale opposite to that which has given the universal antecedent: the sign indicating the extraction impossible to be performed, veils the real quantity, and renders it of no actual value until the sign is taken away, by an involution, the reverse of the supposed operation which the sign represents; although the quantity itself is, in the mean time, by its arbitrary essence, made applicable to all the purposes for which real quantities are used, in every kind of formulæ.

"Several illustrations of these views of the nature of imaginary quantities occurring in logarithmic formulæ, and series expressing circular arcs, are given by the author. By considering all quantity as affirmative per se, and admitting plus and minus merely as correlative terms, we thus succeed in banishing mystery and paradox from the science most powerful in eliciting truth, and where they ought least to find a place."

[Abstract of the Proceedings of the Royal Society, for the 18th November 1830.

NOTE (F). § 165.

To the remarks I have made on ideas, I am happy to add some by Burke, that I have since discovered; and which, as far as they go, confirm all I have said on the subject. It is to be regretted that a writer so eminently qualified for the task did not consider the question in all its bearings; as the sanction of his name could not have failed to draw the attention to it that it so well deserves. His words are:—

" I find it very hard to persuade several that their passions are affected by words from whence they have no ideas; and yet harder to convince them, that in the ordinary course of conversation we are sufficiently understood, without raising any images of the things concerning which we speak. It seems to be an odd subject of dispute with any man, whether he has ideas in his mind or not. Of this, at first view, every man, in his own forum, ought to judge without appeal. But, strange as it may appear, we are often at a loss to understand what ideas we have of things, or whether we have any ideas at all upon some subjects. It even requires a good deal of attention to be thoroughly satisfied on this head. Since I wrote these papers, I found two very striking instances of the possibility there is, that a man may hear words without having any idea of the things which they represent, and yet afterwards be capable of returning them to others, combined in a new way, and with great propriety, energy, and in-The first instance is that of Mr. Blacklock, a struction. poet, blind from his birth. Few men blessed with the most perfect sight can describe visual objects with more spirit and justness than this blind man; which cannot

[&]quot; EXAMPLES THAT WORDS MAY AFFECT, WITHOUT RAISING IMAGES.

possibly be attributed to his having a clearer conception of the things he describes than is common to other persons. Mr. Spence, in an elegant preface which he has written to the works of this poet, reasons very ingeniously, and, I imagine, for the most part, very rightly, upon the cause of this very extraordinary phenomenon; but I cannot altogether agree with him, that some improprieties in language and thought, which occur in these poems, have arisen from the blind poet's imperfect conception of visual objects; since such improprietics, and much greater, may be found in writers even of a higher class than Mr. Blacklock, and who, notwithstanding, possessed the faculty of seeing in its full perfection. Here is a poet doubtless as much affected by his own descriptions as any that reads them can be; and yet he is affected with this strong enthusiasm, by things of which he neither has, nor can possibly have, any idea, further than that of a bare sound: and why may not those who read his works be affected in the same manner that he was, with as little of any real ideas of the things described? The second instance is of Mr. Saunderson, professor of mathematics in the University of Cambridge. This learned man had acquired great knowledge in natural philosophy, in astronomy, and whatever sciences depend upon mathematical skill. What was the most extraordinary, and the most to my purpose, he gave excellent lectures upon light and colours; and this man taught others the theory of those ideas which they had, and which he himself undoubtedly had not. But it is probable that the words red, blue, green, answered to him as well as the ideas of the colour themselves; for the ideas of greater or lesser degrees of refrangibility being applied to these words, and the blind man being instructed in what other respects they were found to agree or to disagree, it was as easy for him to reason upon the words, as if he had been fully master of the ideas. Indeed, it must

be owned he could make no new discoveries in the way of experiment. He did nothing but what we do every day in common discourse. When I wrote this last sentence, and used the words every day and common discourse, I had no images in my mind of any succession of time; nor of men in conference with each other; nor do I imagine that the reader will have any such ideas on reading it. Neither, when I spoke of red, or blue, and green, as well as refrangibility, had I these several colours, or the rays of light passing into a different medium, and there diverted from their course, painted before me in the way of images. I know very well that the mind possesses a faculty of raising such images at pleasure 6; but then an act of the will is necessary to this; and in ordinary conversation or reading, it is very rarely that any image at all is excited in my mind. If I say, "I shall go to Italy next summer," I am well understood. Yet I believe nobody has by this painted in his imagination the exact figure of the speaker passing by land or by water, or both, sometimes on horseback, sometimes in a carriage, with all the particulars of the journey. Still less has he any idea of Italy, the country to which I proposed to go; or of the greenness of the fields, the ripening of the fruits, and the warmth of the air, with the change to this from a different season, which are the ideas for which the word summer is substituted: but least of all has he any image from the word next; for this word stands for the idea of many summers, with the exclusion of all but one: and surely the man who says next summer has no images of such a succession, and such an exclusion. In short, it is not only of those ideas which are commonly called abstract, and of which no image at all can be formed, but even of par-

⁽⁶⁾ Red, blue, green and other colours are *not* images. See my remarks on this subject in §§ 64—68, but particularly in § 66. G. C. H.

ticular real beings, that we converse without having any idea of them excited in the imagination; as will certainly appear on a diligent examination of our own minds. Indeed, so little does poetry depend for its effect upon the power of raising sensible images, that I am convinced it would lose a very considerable part of its energy if this were the necessary result of all description: because that union of affecting words, which is the most powerful of all poetical instruments, would frequently lose its force along with its propriety and consistency, if the sensible images were always excited. There is not, perhaps, in the whole Eneid, a more grand and laboured passage than the description of Vulcan's cavern in Etna, and the works that are carried on there. Virgil dwells particularly on the formation of the thunder, which he describes unfinished under the hammers of the Cyclops. But what are the principles of this extraordinary composition:

> Tres imbris torti radios, tres nubis aquosæ Addiderant; rutili tres ignis et alitis austri; Fulgores nunc terrificos sonitumque, metumque Miscebant operi, flammisque sequacibus iras.

This seems to me admirably sublime: yet, if we attend coolly to the kind of sensible images which a combination of ideas of this sort must form, the chimeras of madmen cannot appear more wild and absurd than such a picture. "Three rays of twisted showers, three of watery clouds, three of fire, and three of the winged south-wind; then mixed they in the work terrific, lightnings, and sound, and fear, and anger, with pursuing flames." This strange composition is formed into a gross body; it is hammered by the Cyclops, it is in part polished, and partly continues rough. The truth is, if poetry gives us a noble assemblage of words, corresponding to many noble ideas, which are connected by circumstances of time or place, or related to each other as cause and effect, or associated in any natural

way, they may be moulded together in any form, and perfectly answer their end. The picturesque connection is not demanded; because no real picture is formed: nor is the effect of the description at all the less upon this account. What is said of Helen, by Priam and the old men of his council, is generally thought to give us the highest possible idea of that fatal beauty:—

Οὐ νέμεσις, Τρῶας καὶ ἐϋκνήμιδας ᾿Αχαιοὺς Τοιῆδ᾽ ἀμφὶ γυναικὶ πολὺν χρόνον ἄλγεα πάσχειν Αἰνῶς δ᾽ ἀθανάτοισι θεῆς εἰς ὧπα ἔοικεν.

They cry'd, No wonder such celestial charms For nine long years have set the world in arms; What winning graces! what vajestic mien! She moves a goddess, and she voks a queen.

POPE.

Here is not one word said of the particulars of her beauty; nothing which can in the least help us to any precise idea of her person; but yet we are much more touched by this manner of mentioning her, than by those long and laboured descriptions of Helen, whether handed down by tradition, or formed by fancy, which are to be met with in some authors. I am sure that it affects me much more than the minute description which Spenser has given of Belphebe: though I own the scription of that excellent writer, extremely fine and poetical. The terrible picture which Lucretius has drawn of Religion, in order to display the magnanimity of his philosophical hero in opposing her, is thought to be designed with great boldness and spirit:—

Humana ante oculos fæda cum vita jaceret, In terris, oppressa gravi sub religione, Quæ caput e cæli regionibus ostendebat Horribili, desuper visu mortalibus instans; Primus Graius homo mortales tollere contra Est oculos ausus.——— What idea do you derive from so excellent a picture?—None at all, most certainly: neither has the poet said a single word which might in the least serve to mark a single limb or feature of the phantom, which he intended to represent in all the horrors imagination can conceive. In reality, poetry and rhetoric do not succeed in exact description, so well as painting does: their business is, to affect rather by sympathy than imitation; to display rather the effect of things on the mind of the speaker, or of others, than to present a clear idea of the things themselves. This is their most extensive province, and that in which they succeed the best."

Burke on the Sublime and Beautiful, Part V. sect 6.

NOTE (G). § 195.

Salt.

FINIS.

